

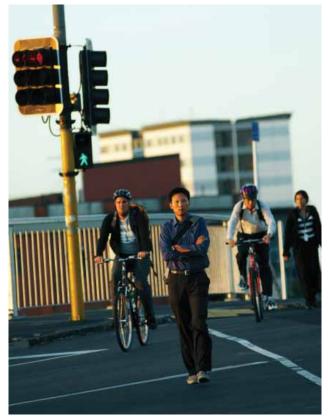
## **YEARLY REPORT 2009**

## **MOTOR VEHICLE CRASHES IN NEW ZEALAND 2008**

STATISTICAL STATEMENT CALENDAR YEAR 2008

Prepared by Transport Monitoring, Ministry of Transport





















+ FATAL: 331

+ INJURY: 11,316

# **CASUALTIES**

+ DEATHS: 366

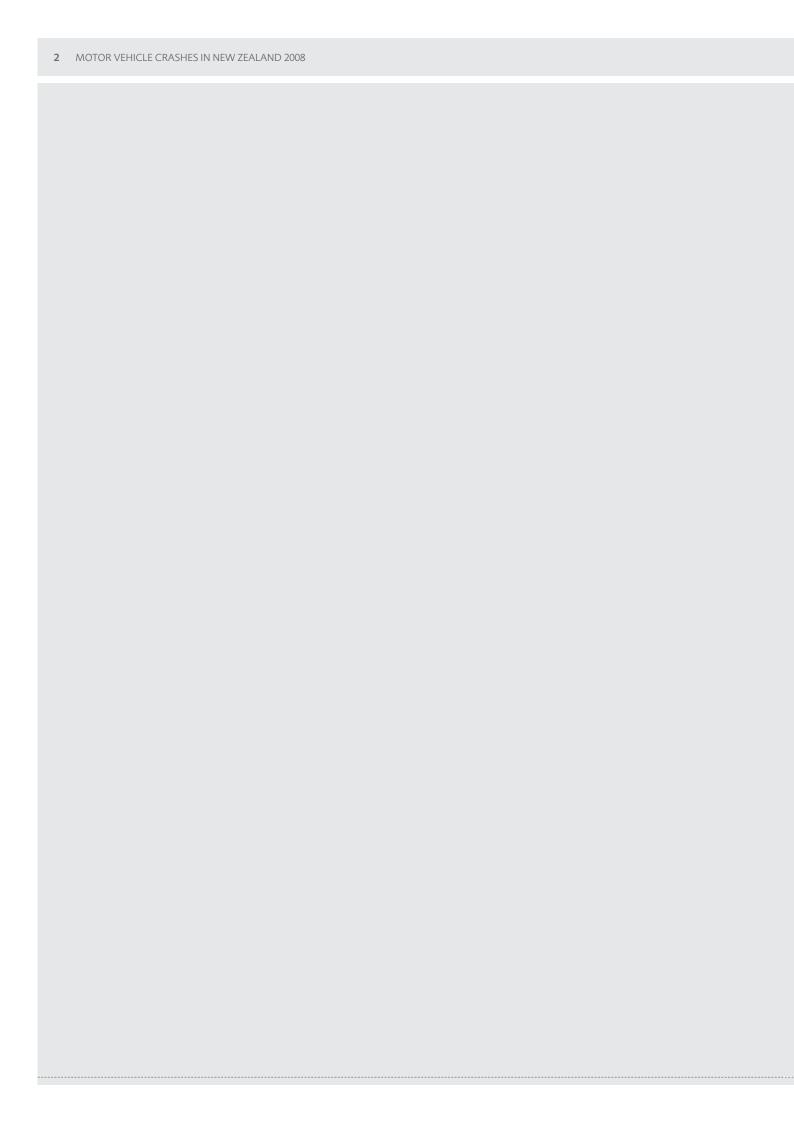
+ INJURIES: 15,174

# **CASUALTY RATES**

- + DEATHS PER 10,000 VEHICLES: 1.1
- + INJURIES PER 10,000 VEHICLES: 47
- + DEATHS PER 100,000 POPULATION: 8.6
- + INJURIES PER 100,000 POPULATION: 356

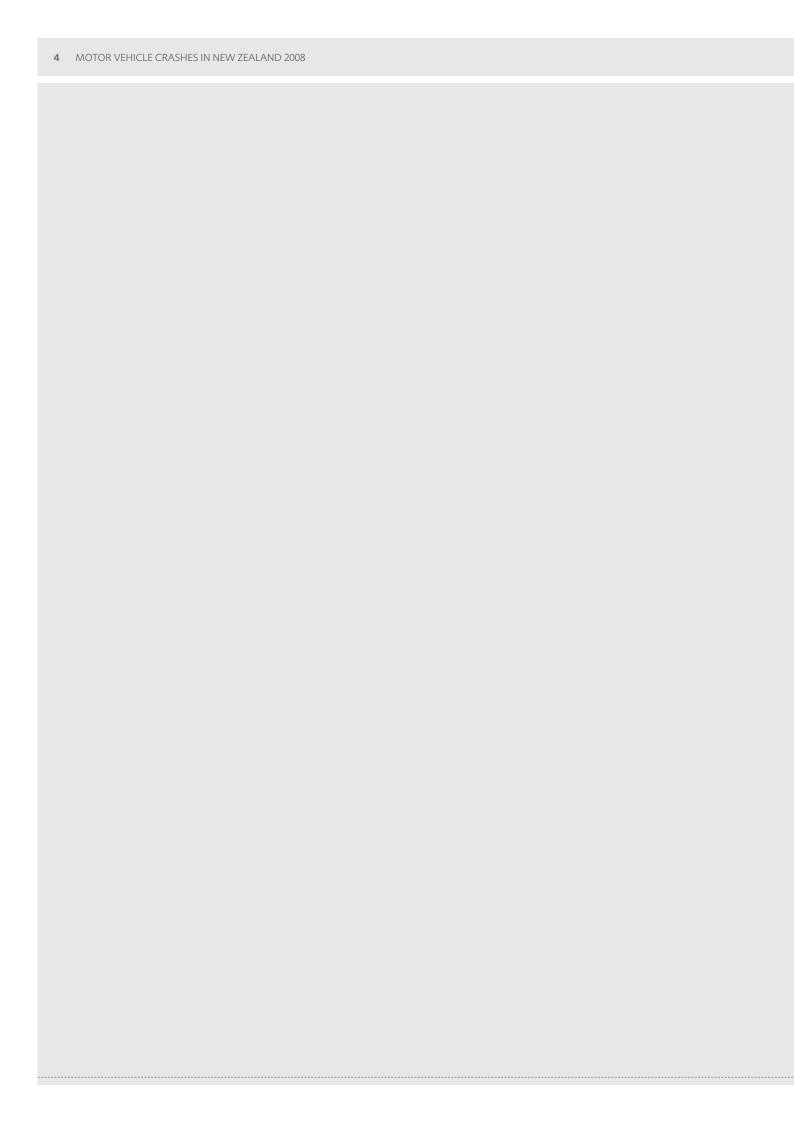
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# **REPORTED INJURY CRASHES 2008**





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## INTRODUCTION AND NOTES

#### INTRODUCTION

This statistical statement contains tabulations of information coded from Traffic Crash Reports. To put these data into context, the following is a brief description of the process which has resulted in this publication.

When a road traffic crash involves a motor vehicle and results in someone being injured, the law requires that crash to be reported. However, comprehensive hospital based surveys indicate that only about two thirds of such injury crashes are reported to the New Zealand Transport Agency (NZ Transport Agency). There may also be a reporting bias by type of road user and by day of week and by hour of day and by region.

When an injury crash is reported it is attended usually by a police officer. The reporting officer's primary duties are to prevent further injury and to help those injured. The next duty is a legal one, to ascertain whether anyone involved in the crash has committed an offence.

After dealing with other duties, this officer completes a Traffic Crash Report (TCR). The TCR is examined and coded by traffic engineers and by administrative staff of NZ Transport Agency and this coded information is entered into the Crash Analysis System (CAS). After editing and checking, the statistical statement is published.

#### **NOTES**

- 1. Under section 22(3) of the Land Transport Act 1998 a driver involved in an accident resulting in death or injury to any person .... must report the accident in person ... as soon as reasonably practicable, and in any case not later than 24 hours after the time of the accident.
- 2. During the years 1975 to 1979 a system of crash reporting was used where a preliminary report, containing partial details of each crash, was sent to the Ministry of Transport within 24 hours of the crash or of it being reported. After investigations were completed a final report was supplied. By the time of printing, preliminary reports only had been received for a number of crashes. Details of those crashes were incomplete and appeared as 'unknown' in the tables. From 1980 the system returned to one report only and as a consequence the number of 'unknowns' has reduced.

The following notes give brief explanations of terms used in the tables.

- 3. Motor vehicle crash Any crash that occurs on a public road that is attributable directly or indirectly to a motor vehicle or its load. Crashes which do not occur on public roads are excluded eg tractor crashes on farms are not included. The data in this statistical statement includes only crashes that involve a motor vehicle. A crash between a cyclist and a pedestrian, for example, would not be included.
- 4. Fatal injuries Up to and including 1974, comprised injuries that resulted in death within 28 days of the crash. From, and including, 1975 they comprise injuries that result in death within 30 days of the crash. This is consistent with the international definition.
  - Exclusions: There are a number of cases where road deaths or motor vehicle deaths are not included in the official road toll. They include:
  - deaths that do not occur on a public road or a road to which the public has access (eg race track or farm paddock)
  - deaths that did not result from injuries sustained in the crash ( eg when the coroner determines that a driver died from a heart attack)
  - > suicide or murder
  - deaths on the road where a motor vehicle was not involved (eg cyclist only crash)

These definitions are in line with the most common international definitions. Although these deaths are excluded from the official road toll, a record is kept of the crash details.

- 5. Serious injuries Fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.
- 6. Minor injuries Injuries of a minor nature such as sprains and bruises.
- 7. Crash, casualty, vehicles involved These terms often cause some confusion. The following example may help to clarify their use. If two motor vehicles collide, one motor vehicle crash has taken place. If four people in one of the vehicles were injured and two in the other, then this one crash resulted in six casualties. The number of vehicles involved was two.

- 8. Non-injury crashes Statistics concerning crashes involving property damage only are not included in this report. The one exception is the total number of such crashes which is recorded in Section 1, Table 2a.
- 9. Movement classification of crashes This is based on the manner in which the vehicles were moving immediately prior to the crash. Bicycles are treated as vehicles for this purpose. These movements are divided firstly into broad classes. These classes are used in the tables in this publication. They are then further divided into a series of sub-classes. A diagrammatic representation of the classes and sub-classes is given in Figure 14.
- 10. Factors contributing to crashes Table 26 lists the factors identified as contributing to crashes (ie causes of crashes). On each crash report there may be several factors coded against each vehicle involved in the crash for driver or vehicle faults. In addition, there may be a number of factors coded on each report for faults of other road users, weather or other conditions. A crash report which has more than one cause factor coded will appear more than once in this table.
  - Alcohol factors The method of coding alcohol factors has been changed in order to get a more accurate recording of this factor in crashes. Because of this, the number of alcohol factors shown from 1975 onwards will not be comparable with those of previous years.
- the terms 'Urban' and 'Open Road' are used: 'Urban' refers to all speed limit areas of 70 km/h and under and limited speed zones. 'Open Road' refers to all speed limit areas of over 70 km/h.

11. Open Road and Urban areas - In all tables where

- 12. Rounding Where percentages are given, these are rounded. This may result in the individual percentages not adding exactly to 100.
- 13. Motorcycle / moped In this document all mopeds and motorcycles have been included under the one heading of 'Motorcycles'. For the purposes of registration and licensing, a moped has a power output of 2 kw or under and a maximum design speed of 50 km/h or under.

- 14. Holiday periods -
- (a) The Christmas New Year holiday period is that which begins in December of the year stated. The length of the official holiday period varies depending on where the statutory holidays fall in relation to the weekend. When Christmas Eve and New Year's Eve fall on a week day the holiday starts at 4.00 pm on 24 December. If the holiday begins on a Monday or a Tuesday then it ends at 6.00 am on 3 January (9.6 days). If the holiday begins from Wednesday to Friday then it ends at 6.00 am on 5 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Saturday the holiday starts at 4.00 pm on Friday 23 December and ends at 6.00 am on Wednesday 4 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Sunday the holiday starts at 4.00 pm on Friday 22 December and ends at 6.00 am on Wednesday 3 January (11.6 days).
- (b) The Easter holiday covers the period from 4.00 pm on the Thursday to 6.00 am on the Tuesday.
- (c) Queen's Birthday and Labour Weekends cover the periods from 4.00 pm on the Friday to 6.00 am on the Tuesday.
- 15. Statistics recorded and stored from the Traffic Crash Report -
- (a) Location of crash Local body name, crash road, nearest side road or landmark and the distance and direction of the crash from that side road or landmark, State highway reference.
- (b) Type and Time Severity of crash (fatal or injury), date, time and day of week, type of collision, vehicle types involved.
- (c) Vehicle details for each vehicle involved Registration number, type (car, truck etc) make and model, year, engine capacity (cm3), warrant/certificate of fitness, parked or reversing, damage (minor, extensive etc), number of passengers and type of tow.
- (d) Driver details for each driver involved whether injured or not
  - Whether driver owned vehicle, surname, date of birth, sex, occupation, licence number, licence status (current, disqualified etc), driver injury (killed, serious, minor, none), alcohol suspected, factors (causes) assigned to driver and/or vehicle.



### 16. Change in vehicle licensing system -

In 1986 the system for licensing vehicles in New Zealand changed. For this reason there are no currently collected statistics that are directly comparable to those collected prior to this date. From 1986 to 1997 the number of vehicles used in Table 1 and Table 2 was derived from a model based on historical data and the number of new vehicle registrations each year. From 1998, the first full year with Continuous Vehicle Licensing, vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds, but excludes those with an exempt or restoration licence. See page 163 for a breakdown of the fleet at June 30 for the current year.

SECTION 1: HISTORICAL



TABLE 1: CASUALTY RATES HISTORICAL YEAR ENDING 31 DECEMBER

				INJURIES			FATALITIES	
Year	Population	Vehicles* (000)	Number of	Per 100,000	Per 10,000	Number of	Per 100,000	Per 10,000
	(000)		Injuries	Population	Vehicles	Fatalities	Population	Vehicles
1951	1970.5	447.1	6938	352	155.2	292	14.8	6.5
1952	2024.6	494.2	7448	368	150.7	272	13.4	5.5
1953	2074.7	513.7	7686	371	149.6	313	15.1	6.1
1954	2118.4	553.5	7875	372	142.3	360	17.0	6.5
1955	2164.8	601.1	8976	415	149.3	333	15.4	5.5
1956	2209.2	638.3	9758	442	152.9	329	14.9	5.2
1957	2262.8	672.6	11053	489	164.3	384	17.0	5.7
1958	2360.0	702.9	11408	483	162.3	379	16.1	5.4
1959	2359.7	728.2	11703	496	160.7	349	14.8	4.8
1960	2403.6	762.7	12443	518	163.1	374	15.6	4.9
1961	2461.3	806.3	12796	520	158.7	393	16.0	4.9
1962	2515.8	844.1	13776	548	163.2	398	15.8	4.7
1963	2566.8	899.4	14447	563	160.6	394	15.3	4.4
1964	2617.0	963.9	16266	622	168.8	428	16.4	4.4
1965	2663.8	1013.8	17093	642	168.6	559	21.0	5.5
1966	2711.3	1060.2	18194	671	171.6	549	20.2	5.2
1967	2745.0	1087.6	17409	634	160.1	570	20.8	5.2
1968	2773.0 2804.0	1114.7	17698	638	158.8	522	18.8	4.7
1969		1148.7	18726	668	163.0	570	20.3	5.0
1970	2852.1	1208.7	20791	729 746	172.0	655 677	23.0	5.4
1971 1972	2898.5 2959.7	1272.4 1349.1	21607 22315	754	169.8 165.4	713	23.4	5.3
1972	3024.9	1438.8	23385	773	162.5	843	27.9	5.9
1973	3024.9	1515.3	20829	674	137.5	676	21.9	4.5
1974	3143.7	1574.5	19839	631	126.0	628	20.0	4.0
1976	3163.4	1631.3	17895	566	109.7	609	19.3	3.7
1977	3166.4	1642.8	17525	554	106.7	702	22.2	4.3
1978	3165.2	1675.1	15178	480	90.6	654	20.7	3.9
1979	3163.9	1732.9	13903	439	80.2	554	17.5	3.2
1980	3176.4	1789.4	15872	500	88.7	599	18.9	3.3
1981	3194.5	1848.6	15479	485	83.7	669	20.9	3.6
1982	3226.8	1882.5	16194	502	86.0	673	20.9	3.6
1983	3264.8	1917.4	16491	505	86.0	644	19.7	3.4
1984	3293.0	1968.9	17524	532	89.0	669	20.3	3.4
1985	3303.1	1996.1	18912	573	94.7	747	22.6	3.7
1986	3313.5	2010.1	18874	570	93.9	766	23.1	3.8
1987	3342.1	2030.6	18728	560	92.2	795	23.8	3.9
1988	3345.2	2045.4	17346	519	84.8	727	21.7	3.6
1989	3369.8	2108.4	16594	492	78.7	755	22.4	3.6
1990	3410.4	2197.7	17719	520	80.6	729	21.4	3.3
1991	3449.7	2220.1	16767	486	75.5	650	18.8	2.9
1992	3485.4	2227.1	16121	463	72.4	646	18.5	2.9
1993	3524.8	2243.8	15108	429	67.3	600	17.0	2.7
1994	3577.2	2289.3	16600	464	72.5	580	16.2	2.5
1995	3643.2	2354.6	16870	463	71.6	582	16.0	2.5
1996	3717.4	2379.8	14796	398	62.2	514	13.8	2.2
1997	3761.1	2392.7	13375	356	55.9	539	14.3	2.3
1998	3790.9	2440.4	12412	327	50.9	501	13.2	2.1
1999	3810.7	2512.3	11999	315	47.8	509	13.4	2.0
2000	3830.8	2601.7	10962	286	42.1	462	12.1	1.8
2001	3850.1	2633.2	12368	321	47.0	455	11.8	1.7
2002	3939.1	2709.5	13918	353	51.4	405	10.3	1.5
2003	4009.2	2801.0	14372	359	51.3	461	11.5	1.6
2004	4060.9	2920.7	13890	342	47.6	435	10.7	1.5
2005	4098.3	3030.4	14451	353	47.7	405	9.9	1.3
2006	4139.5	3124.3	15174	367	48.6	393	9.5	1.3
2007	4228.3	3189.1	16013	379	50.2	421	10.0	1.3
2008	4268.6	3247.8	15174	356	46.7	366	8.6	1.1

NOTES: Population: From 1997 the population is the resident population at 30 June - SNZ INFOS series DPEA.SDBC. \* Vehicles: See Note 16 for details. From 1998 (the first full year with Continuous Vehicle Licensing) vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds but excludes those with an exempt or restoration licence. From 1986 to 1997 vehicle numbers are estimates. Prior to 1986 vehicle numbers were derived from annual licence transactions.

**FIGURE 1: ROAD DEATHS** 

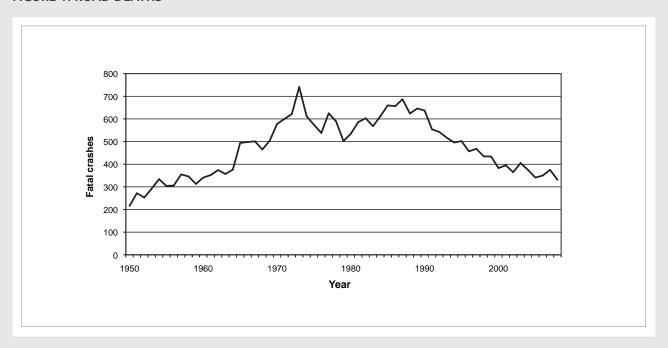
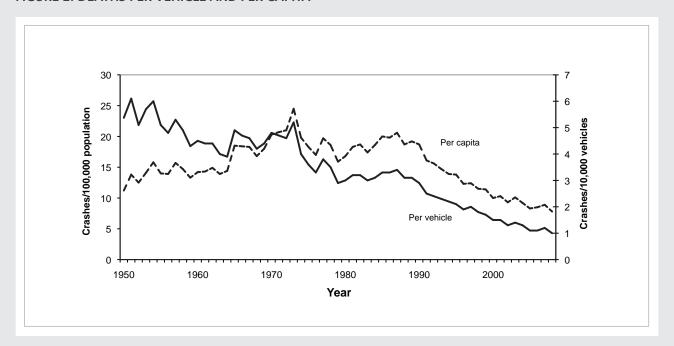


FIGURE 2: DEATHS PER VEHICLE AND PER CAPITA





**FIGURE 3: REPORTED INJURIES** 

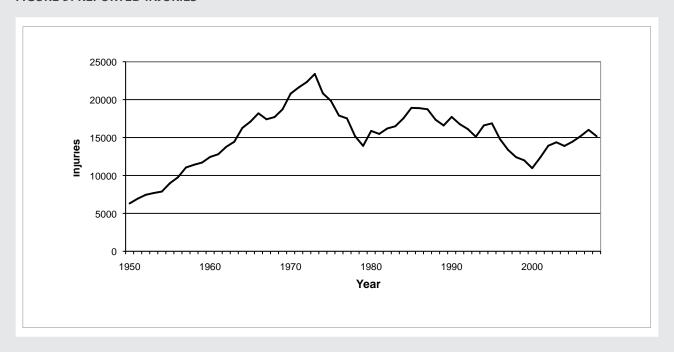


FIGURE 4: INJURIES PER VEHICLE AND PER CAPITA

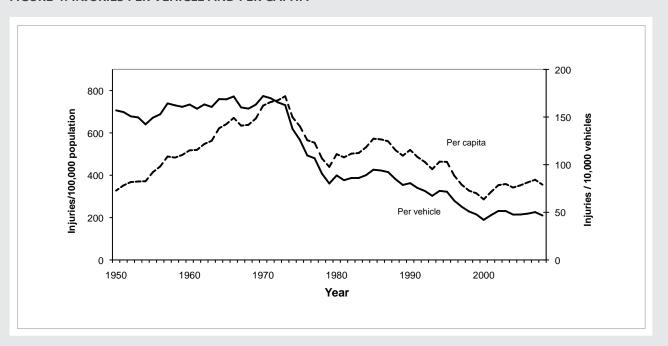


TABLE 2: CRASH RATES HISTORICAL YEAR ENDING 31 DECEMBER

					INJURY	FATAL				
1952   2024.6	Year		Vehicles* (000)	Injury Crashes	Per 100,000		Fatal Crashes	Per 100,000	Per 10,000 Vehicles	
1953   2074 7   5137   5377   259   1047   292   14.1     1954   2118.4   5533   5561   263   100.5   334   15.8     1955   2164.8   601.1   6372   294   106.0   304   14.0     1956   2209.2   638.3   6736   305   105.5   306   13.9     1957   2262.8   672.6   7799   336   111.9   355   15.7     1958   2360.0   702.9   778.8   335   111.7   346   14.7     1959   2359.7   72.2   7852   337   109.2   313   13.3     1960   2403.6   76.77   850.3   354   111.5   341   14.2     1962   2403.6   76.27   850.3   354   111.5   341   14.2     1962   2515.8   884.1   9270   369   109.8   374   14.9     1963   2566.8   894   9514   377   105.8   357   13.9     1964   2617.0   96.9   10960   419   113.7   376   14.4     1966   2711.3   106.0   11966   442   113.1   498   18.4     1968   2773.0   1114.7   1160   418   104.1   465   16.8     1968   2773.0   1114.7   1160   418   104.1   465   16.8     1970   2852.1   1208.7   1272.2   446   105.3   578   20.3     1971   2898.5   1272.4   1340.4   462   105.3   578   20.3     1973   304.9   148.8   148.0   40.0   62.2   21.0     1973   2959.7   1349.1   1402.2   474   104.0   62.2   21.0     1974   3091.9   1515.3   1349.7   437   104.0   62.2   21.0     1978   3165.2   1675.1   1394.7   437   379   374   44.5     1978   3163.4   161.3   178.9   379   72.2   538   170.0     1979   3284.5   1272.4   1340.4   462   105.3   578   20.3     1979   3284.1   1208.7   1272.2   446   105.3   578   20.3     1979   3284.1   1208.7   1272.2   446   105.3   578   20.3     1979   3165.4   161.3   178.9   379   72.2   538   170.0     1979   3165.4   161.3   178.9   379   72.2   538   170.0     1979   3165.4   161.3   178.9   379   72.2   538   170.0     1979   3165.4   1661.3   178.9   379   72.2   538   170.0     1979   3166.4   1642.8   114.8   361   60.7   60.7   60.7   13.8     1989   3369.8   2108.4   1139.5   338   540.0   64.6   600   20.0     1989   3369.8   2108.4   1139.5   338   540.0   64.6   600   20.0     1999   3440.4   220.1   1160.9   337   52.2   538   170.0     1999   34	1951		447.1	4952	251	110.8	272		6.1	
1994	1952	2024.6	494.2	5336	264	108.0	253	12.5	5.1	
1955   2164.8   2002   633.3   673.6   306   304   304   304   305   3	1953	2074.7	513.7	5377	259	104.7	292	14.1	5.7	
1996   2200.2   638.3   673.6   30.5   30.6   13.9     1997   226.2   672.6   779.3   33.6   11.2   355   15.7     1958   2360.0   702.9   728.2   799.2   337   111.7   346   14.7     1959   2359.7   728.2   799.2   337   111.7   346   14.7     1960   2403.6   762.7   8503   354   111.5   341   14.2     1961   2461.3   806.3   86.79   3533   107.6   35.2   14.3     1962   2515.8   844.1   92.70   369   109.8   374   14.9     1963   7566.8   899.4   9514   371   105.8   357   13.9     1964   2617.0   963.9   10600   419   113.7   376   14.4     1965   2663.8   1013.8   11377   42.7   111.2   494   18.5     1966   2711.3   1060.2   1198.6   442   113.1   498   18.4     1967   2745.0   1018.7   1146   417   105.2   501   18.3     1969   2804.0   1148.7   11600   418   104.1   465   16.8     1970   2852.1   120.8   1272.2   446   105.3   578   20.3     1971   2888.5   1272.4   13404   462   105.3   578   20.3     1971   2889.5   1348.1   14032   474   104.0   622   21.0     1973   3004.9   1438.8   1483.0   490   103.1   741   24.5     1974   3001.9   1438.8   1483.0   490   103.1   741   24.5     1975   3143.7   1574.5   315.6   419   83.6   574   18.3     1976   3163.4   104.8   114.3   301   60.7   60.5   509   18.6     1977   3166.4   104.2   1178.3   373   72.2   538   17.0     1973   304.9   1438.8   1483.0   490   103.1   741   24.5     1974   305.9   1372.9   9212   291   53.2   502   15.9     1978   3165.2   1675.1   9795   310   58.5   589   18.6     1977   3166.4   104.8   114.3   361   69.7   62.5   97.7     1978   3165.9   1729.9   9212   291   53.2   502   18.3     1980   3176.4   1789.4   10004   321   57.0   535   16.8     1980   3315.5   2010.1   12806   387   39.5   58.9   18.6     1981   3194.3   304.9   1488.6   1007.9   36.6   603   18.7     1999   3361.9   172.9   9212   291   53.2   502   18.6     1999   3362.8   1977.4   1099   36.5   60.7   60.5   19.8     1999   3362.8   1977.7   1779   357   53.4   66.6   67.7   18.6     1999   3362.8   2007.7   2447   194   28.6   63.8   100.0     1999	1954	2118.4	553.5	5561	263	100.5	334	15.8	6.0	
1957	1955	2164.8	601.1	6372	294	106.0	304	14.0	5.1	
1997	1956	2209.2	638.3	6736	305	105.5	306	13.9	4.8	
1958									5.3	
1960	1958	2360.0	702.9	7848	333	111.7	346	14.7	4.9	
1961	1959	2359.7	728.2	7952	337	109.2	313	13.3	4.3	
1961				8503	354		341	14.2	4.5	
1962	1961		806.3	8679	353		352	14.3	4.4	
1963			844.1	9270	369		374	14.9	4.4	
1964									4.0	
1965   2663.8   1013.8   11377   427   112.2   494   18.5   1966   2711.3   1060.2   11986   442   113.1   498   18.4   1967   2745.0   1087.6   11446   417   105.2   501   18.3   1968   2773.0   1114.7   11600   418   104.1   465   16.8   16.8   1999   2804.0   1148.7   12050   430   104.9   504   18.0   1970   2852.1   1208.7   12722   446   105.3   578   20.3   1971   2898.5   1272.4   13404   462   105.3   600   20.7   1973   3024.9   1438.8   14830   490   103.1   741   24.5   1974   3091.9   1515.3   1349.7   437   89.1   612   19.8   1975   3143.7   1574.5   1315.6   419   83.6   574   18.3   1976   3163.4   1631.3   11783   373   72.2   538   17.0   1978   3165.2   1675.1   9795   310   58.5   589   18.6   1981   3194.5   1394.9   10204   321   57.0   535   16.8   1981   3194.5   1882.5   10656   330   56.6   603   18.7   1983   3226.8   1882.5   10656   330   56.6   603   18.7   1983   3303.1   1996.1   12894   3099.9   3163.9   1719.9   3163.9   1729.9   9212   291   53.2   502   15.9   1980   3176.4   1789.4   10204   321   57.0   535   16.8   183   1983   3226.8   1882.5   10656   330   56.6   603   18.7   1983   3226.8   1882.5   10656   330   56.6   603   18.7   1983   3303.1   1996.1   12894   3090   64.6   660   20.0   1988   3345.2   2045.4   1199.9   336.3   60.7   612   18.6   18.6   1986   3313.5   2010.1   12806   387   63.7   64.6   64.0   20.0   1988   3345.2   2045.4   1199.9   336.3   60.7   612   18.6   64.9   1999   346.9   2027.1   11099   337   52.3   554   63.7   18.7   1991   3449.7   2220.1   11609   337   52.3   554   63.7   18.7   1991   3449.7   2220.1   11609   337   52.3   554   63.7   18.7   1991   3449.7   2220.1   11609   337   52.3   554   63.7   18.7   1991   3449.7   2220.1   11609   337   52.3   554   63.7   18.7   1991   3449.7   2220.1   11609   337   52.3   554   63.7   14.7   14.7   1991   3449.7   2220.1   11609   337   52.3   554   63.1   19.9   10.0   330.8   200.1   200.0   330.8   200.1   200.0   330.8   200.1   200.0   330.8   200.1   200.0   330.8   200.1									3.9	
1966   2711.3   1060.2   11986   442   113.1   498   18.4   1967   2745.0   1087.6   11446   417   105.2   501   18.3   1968   2773.0   1114.7   11000   418   104.1   465   16.8   1969   2804.0   1148.7   12050   430   104.9   504   18.0   1970   2852.1   1208.7   1272.2   446   105.3   578   20.3   1971   2898.5   1272.4   13404   462   105.3   600   20.7   1972   2959.7   1349.1   14032   474   104.0   622   21.0   1973   3024.9   1438.8   1438.0   490   103.1   741   24.5   1974   3091.9   1515.3   13497   437   88.1   612   19.8   1975   3143.7   1574.5   13156   419   83.6   574   18.3   1976   3163.4   1631.3   11783   373   72.2   538   17.0   1978   3165.2   1675.1   9795   310   58.5   589   18.6   1979   3163.9   1732.9   9212   291   53.2   502   15.9   1980   3174.4   1394.5   13									4.9	
1967									4.7	
1968   2773 0									4.6	
1969   2804 0									4.2	
1970   2852.1   1208.7   1272.2   446   105.3   578   20.3   1971   2898.5   1272.4   13404   462   105.3   600   20.7   1972   2959.7   1349.1   14052   474   104.0   622   21.0   1973   3024.9   1488.8   14830   490   103.1   741   24.5   1974   3091.9   1515.3   1349.7   437   89.1   612   19.8   1975   3143.7   1574.5   13156   419   83.6   574   18.3   1976   3163.4   1631.3   11783   373   72.2   538   17.0   1977   3166.4   164.2   1143.3   3178   373   72.2   538   17.0   1977   3166.4   164.2   1143.3   3178   310   58.5   589   18.6   1979   3163.9   1732.9   9212   291   53.2   502   15.9   1980   3176.4   1789.4   10204   321   57.0   535   16.8   1981   3194.5   1848.6   10079   316   54.5   586   18.3   1822   3226.8   1882.5   10656   330   56.6   603   18.7   1984   3293.0   1968.9   11949   363   60.7   612   18.6   1986   3313.5   2010.1   12806   387   63.7   656   19.8   1987   3349.5   2010.1   12806   387   63.7   656   19.8   1989   3349.5   2010.1   12806   387   63.7   656   19.8   1989   3369.8   2108.4   11936   337   52.3   55.4   66.0   10.2   1990   3410.4   2197.7   12179   357   55.4   66.0   19.8   1991   3449.7   2220.1   11609   337   52.3   55.4   66.0   19.8   1999   3469.8   2108.4   11936   337   52.3   55.4   66.0   19.8   1999   3469.8   2108.4   11936   337   52.3   55.4   66.1   19.8   1999   3499.7   2220.1   11609   337   52.3   55.4   66.1   19.2   1999   3410.4   2197.7   12179   357   55.4   66.1   12.1   1992   3488.4   2227.1   11093   318   49.8   542   15.6   1999   350.8   200.8   101.8   101.8   101.8   10.8									4.4	
1971   2898.5   1272.4   13404   462   105.3   600   20.7   1972   2999.7   1349.1   14052   474   104.0   622   21.0   1973   3024.9   1438.8   14830   490   103.1   741   24.5   1974   3091.9   1515.3   13497   437   89.1   612   19.8   1975   3143.7   1574.5   13156   419   83.6   574   18.3   1976   3163.4   1631.3   11783   373   72.2   538   17.0   1977   3166.4   1642.8   11443   361   69.7   625   19.7   1978   3163.9   1732.9   9212   291   53.2   502   15.9   18.6   1979   3163.9   1732.9   9212   291   53.2   502   15.9   1980   3176.4   1789.4   10004   321   57.0   535   16.8   1981   3194.5   1848.6   10079   316   54.5   586   18.3   1982   3226.8   1882.5   10656   330   56.6   603   18.7   1983   3264.8   1917.4   10951   335   57.1   568   17.4   1984   3293.0   1996.9   11949   363   60.7   612   18.6   1985   3303.1   1996.1   12894   390   64.6   660   20.0   1986   3313.5   2010.1   12896   387   63.7   656   19.8   1989   3349.2   200.6   12674   379   62.4   687   20.6   19.8   1999   3410.4   2197.7   12179   357   554   637   18.7   1991   3449.7   2220.1   11609   337   52.3   554   16.1   1999   3410.4   2197.7   12179   357   554   637   18.7   1991   3449.7   2220.1   11609   337   52.3   554   16.1   1999   3410.4   2197.7   12179   357   554   637   18.7   1991   3449.7   2220.1   11609   337   52.3   554   16.1   1999   340.4   2197.7   12179   357   55.4   637   18.7   1994   357.0   238.6   118.8   11996   371.4   2392.8   10107   272   42.5   457   12.3   1996   371.4   2392.8   10107   272   42.5   457   12.3   1996   371.4   2392.7   9013   240   37.7   468   12.4   1999   360.2   363.2   2354.6   11718   322   49.8   502   38.8   10.0   2000   380.8   2601.7   7447   194   28.6   38.3   10.0   2000   380.8   2601.7   7447   194   28.6   38.3   10.0   2000   380.8   2601.7   7447   194   28.6   38.3   10.0   2000   380.8   2601.7   7447   194   28.6   38.3   10.0   2001   380.0   2601.7   2425   3455   345   341   8.3   2006   4098.3   300.0 4   10467   255   34.5   341									4.8	
1972   2959.7   1349.1   1403.2   474   104.0   622   21.0   1973   3024.9   1438.8   14830   490   103.1   7741   24.5   1974   3091.9   1515.3   1349.7   437   89.1   612   19.8   1975   3143.7   1574.5   13156   419   83.6   574   18.3   1976   3163.4   1631.3   11783   373   72.2   25.5   19.7   1978   3165.2   1675.1   9795   310   58.5   589   18.6   1979   3163.9   1732.9   2912   291   53.2   502   15.9   1980   3176.4   1789.4   10204   321   57.0   535   16.8   1981   3194.5   1848.6   10079   316   54.5   586   18.3   1982   3226.8   188.2   510556   330   56.6   603   18.7   1983   3264.8   1917.4   10951   335   57.1   568   17.4   1984   3293.0   1968.9   11949   363   60.7   612   18.6   1986   3313.5   2010.1   12806   387   63.7   656   19.8   1987   3342.1   2030.6   12674   379   62.4   68.7   20.6   1988   3345.2   2045.4   11956   357   58.4   624   18.7   1999   3369.8   2108.4   11996   337   52.3   554   637   18.7   1999   3369.8   2108.4   11995   338   54.0   646   640   20.0   1986   3313.5   2010.1   12806   387   63.7   656   19.8   1990   3410.4   2197.7   2179   357   55.4   637   18.7   1991   3449.7   2220.1   11609   337   52.3   554   16.1   1992   3485.4   2227.1   11093   318   49.8   54.2   15.6   1999   3369.8   2108.4   11395   338   54.0   646   19.2   1999   3452.8   2227.1   11093   318   49.8   54.2   15.6   15.6   1999   3350.8   2227.1   11093   318   49.8   54.2   15.6   15.6   1999   3352.8   22245.8   10477   297   46.7   517   14.7   1994   3577.2   2289.3   11380   318   49.7   496   13.9   1995   3643.2   2354.6   11718   322   49.8   502   33.8   10.0   2000   3330.8   2001.7   2447   1944   28.6   383   10.0   2001   3380.8   2001.7   2447   1944   28.6   383   10.0   2002   3939.1   2709.5   9798   249   36.2   365   9.3   2003   4009.2   2801.0   10210   255   36.5   34.5   341   8.3   2006   4139.5   3124.3   10943   264   35.0   350   8.5   2007   4228.3   3189.1   10667   256   36.6   355   8.9   2007   4228.3   3189.1   10667   256   36.6   355   36									4.7	
1973         3024.9         1438.8         14830         490         103.1         741         24.5           1974         3091.9         1515.3         13497         437         89.1         612         19.8           1975         3143.7         1574.5         13156         419         83.6         574         18.3           1976         3163.4         1631.3         11783         373         72.2         538         17.0           1977         3166.4         1642.8         11443         361         69.7         625         19.7           1978         3165.2         1675.1         9795         310         58.5         589         18.6           1979         3163.9         1732.9         9212         291         53.2         502         15.9           1980         3176.4         1789.4         10024         321         57.0         535         16.8           1981         3194.5         1848.6         10079         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4.6</td></t<>									4.6	
1974         3091.9         1515.3         13497         437         89.1         612         19.8           1975         3143.7         1574.5         13156         419         83.6         574         18.3           1976         3163.4         1631.3         11783         337         72.2         538         17.0           1977         3166.4         1642.8         11443         361         69.7         625         19.7           1978         3165.2         1675.1         9795         310         58.5         589         18.6           1980         3176.4         1789.4         10204         321         57.0         535         16.8           1981         3194.5         1848.6         10079         316         54.5         586         18.3           1982         3222.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5.2</td></t<>									5.2	
1975         3143.7         1574.5         13156         419         83.6         574         18.3           1976         3163.4         1631.3         11783         373         72.2         538         17.0           1977         3166.4         1642.8         11443         361         69.7         625         19.7           1978         3165.2         1675.1         9795         310         58.5         589         18.6           1979         3163.9         1732.9         9212         291         53.2         502         15.9           1980         3176.4         1789.4         10204         321         57.0         535         16.8           1981         3194.5         1884.6         10079         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4.0</td></td<>									4.0	
1976   3163.4   1631.3   11783   373   72.2   538   17.0     1977   3166.4   1642.8   11443   361   69.7   625   19.7     1978   3165.2   1675.1   9795   310   58.5   589   18.6     1979   3163.9   1732.9   9212   291   53.2   502   15.9     1980   3176.4   1789.4   10204   321   57.0   535   16.8     1981   3194.5   1848.6   10079   316   54.5   586   18.3     1982   3226.8   1882.5   10656   330   56.6   603   18.7     1983   3264.8   1917.4   10951   335   57.1   568   17.4     1984   3293.0   1968.9   11949   363   60.7   612   18.6     1985   3303.1   1996.1   12894   390   64.6   660   20.0     1986   3313.5   2010.1   12806   387   63.7   656   19.8     1987   3342.1   2030.6   12674   379   62.4   687   20.6     1988   3345.2   2045.4   11936   357   58.4   624   18.7     1989   3369.8   2108.4   11395   338   54.0   646   19.2     1990   3410.4   2197.7   12179   357   55.4   637   18.7     1991   3449.7   2220.1   11609   337   52.3   554   16.1     1992   3485.4   2227.1   11093   318   49.8   542   15.6     1993   3524.8   2243.8   10477   297   46.7   517   14.7     1994   3577.2   2289.3   11380   318   49.7   496   13.9     1995   3643.2   2354.6   11718   322   49.8   502   13.8     1996   3717.4   2379.8   10107   272   42.5   457   12.3     1999   3810.7   2512.3   8010   210   31.9   434   11.4     1999   3810.7   2512.3   8010   210   31.9   434   11.4     1999   3810.7   2512.3   8010   210   31.9   434   11.4     1990   3850.1   2633.2   8470   220   32.2   395   10.3     2002   3939.1   2705   9798   249   36.2   36.5   405   10.1     2004   4060.9   2920.7   9992   246   34.2   375   38.9     2005   4088.3   3189.1   11667   276   36.6   375   8.9									3.6	
1977         3166.4         1642.8         11443         361         69.7         625         19.7           1978         3165.2         1675.1         9795         310         58.5         589         18.6           1979         3163.9         1732.9         9212         291         53.2         502         15.9           1980         3176.4         1789.4         10204         321         57.0         535         16.8           1981         3194.5         1848.6         10029         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         333         56.6         603         18.7           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         600         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.3</td></td<>									3.3	
1978									3.8	
1979         3163.9         1732.9         9212         291         53.2         502         15.9           1980         3176.4         1789.4         10204         321         57.0         535         16.8           1981         3194.5         1848.6         10079         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         600         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.5</td></t<>									3.5	
1980         3176.4         1789.4         10204         321         57.0         535         16.8           1981         3194.5         1848.6         10079         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         <									2.9	
1981         3194.5         1848.6         10079         316         54.5         586         18.3           1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         <										
1982         3226.8         1882.5         10656         330         56.6         603         18.7           1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         <									3.0	
1983         3264.8         1917.4         10951         335         57.1         568         17.4           1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         55.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         <									3.2	
1984         3293.0         1968.9         11949         363         60.7         612         18.6           1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         1047         297         46.7         517         14.7           1994         3577.2 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.2</td></t<>									3.2	
1985         3303.1         1996.1         12894         390         64.6         660         20.0           1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         <									3.0	
1986         3313.5         2010.1         12806         387         63.7         656         19.8           1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         <									3.1	
1987         3342.1         2030.6         12674         379         62.4         687         20.6           1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         <									3.3	
1988         3345.2         2045.4         11936         357         58.4         624         18.7           1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.3</td></t<>									3.3	
1989         3369.8         2108.4         11395         338         54.0         646         19.2           1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3.4</td></td<>									3.4	
1990         3410.4         2197.7         12179         357         55.4         637         18.7           1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8									3.1	
1991         3449.7         2220.1         11609         337         52.3         554         16.1           1992         3485.4         2227.1         11093         318         49.8         542         15.6           1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2									3.1	
1992       3485.4       2227.1       11093       318       49.8       542       15.6         1993       3524.8       2243.8       10477       297       46.7       517       14.7         1994       3577.2       2289.3       11380       318       49.7       496       13.9         1995       3643.2       2354.6       11718       322       49.8       502       13.8         1996       3717.4       2379.8       10107       272       42.5       457       12.3         1997       3761.1       2392.7       9013       240       37.7       468       12.4         1998       3790.9       2440.4       8334       220       34.2       435       11.5         1999       3810.7       2512.3       8010       210       31.9       434       11.4         2000       3830.8       2601.7       7447       194       28.6       383       10.0         2001       3850.1       2633.2       8470       220       32.2       395       10.3         2002       3939.1       2709.5       9798       249       36.2       365       9.3         2003									2.9	
1993         3524.8         2243.8         10477         297         46.7         517         14.7           1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801									2.5	
1994         3577.2         2289.3         11380         318         49.7         496         13.9           1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920	1992	3485.4		11093	318	49.8		15.6	2.4	
1995         3643.2         2354.6         11718         322         49.8         502         13.8           1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4	1993	3524.8	2243.8	10477	297	46.7	517	14.7	2.3	
1996         3717.4         2379.8         10107         272         42.5         457         12.3           1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4         10467         255         34.5         341         8.3           2006         4139.5         3124.3<						49.7			2.2	
1997         3761.1         2392.7         9013         240         37.7         468         12.4           1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4         10467         255         34.5         341         8.3           2006         4139.5         3124.3         10943         264         35.0         350         8.5           2007         4228.3         3189.1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.1</td>									2.1	
1998         3790.9         2440.4         8334         220         34.2         435         11.5           1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4         10467         255         34.5         341         8.3           2006         4139.5         3124.3         10943         264         35.0         350         8.5           2007         4228.3         3189.1         11667         276         36.6         375         8.9	1996		2379.8	10107	272		457	12.3	1.9	
1999         3810.7         2512.3         8010         210         31.9         434         11.4           2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4         10467         255         34.5         341         8.3           2006         4139.5         3124.3         10943         264         35.0         350         8.5           2007         4228.3         3189.1         11667         276         36.6         375         8.9	1997	3761.1	2392.7	9013	240	37.7			2.0	
2000         3830.8         2601.7         7447         194         28.6         383         10.0           2001         3850.1         2633.2         8470         220         32.2         395         10.3           2002         3939.1         2709.5         9798         249         36.2         365         9.3           2003         4009.2         2801.0         10210         255         36.5         405         10.1           2004         4060.9         2920.7         9992         246         34.2         375         9.2           2005         4098.3         3030.4         10467         255         34.5         341         8.3           2006         4139.5         3124.3         10943         264         35.0         350         8.5           2007         4228.3         3189.1         11667         276         36.6         375         8.9	1998	3790.9	2440.4	8334	220	34.2	435	11.5	1.8	
2001     3850.1     2633.2     8470     220     32.2     395     10.3       2002     3939.1     2709.5     9798     249     36.2     365     9.3       2003     4009.2     2801.0     10210     255     36.5     405     10.1       2004     4060.9     2920.7     9992     246     34.2     375     9.2       2005     4098.3     3030.4     10467     255     34.5     341     8.3       2006     4139.5     3124.3     10943     264     35.0     350     8.5       2007     4228.3     3189.1     11667     276     36.6     375     8.9	1999	3810.7	2512.3	8010	210	31.9	434	11.4	1.7	
2002     3939.1     2709.5     9798     249     36.2     365     9.3       2003     4009.2     2801.0     10210     255     36.5     405     10.1       2004     4060.9     2920.7     9992     246     34.2     375     9.2       2005     4098.3     3030.4     10467     255     34.5     341     8.3       2006     4139.5     3124.3     10943     264     35.0     350     8.5       2007     4228.3     3189.1     11667     276     36.6     375     8.9	2000	3830.8	2601.7	7447	194	28.6		10.0	1.5	
2003     4009.2     2801.0     10210     255     36.5     405     10.1       2004     4060.9     2920.7     9992     246     34.2     375     9.2       2005     4098.3     3030.4     10467     255     34.5     341     8.3       2006     4139.5     3124.3     10943     264     35.0     350     8.5       2007     4228.3     3189.1     11667     276     36.6     375     8.9	2001	3850.1	2633.2	8470	220	32.2	395	10.3	1.5	
2004     4060.9     2920.7     9992     246     34.2     375     9.2       2005     4098.3     3030.4     10467     255     34.5     341     8.3       2006     4139.5     3124.3     10943     264     35.0     350     8.5       2007     4228.3     3189.1     11667     276     36.6     375     8.9	2002	3939.1	2709.5	9798	249	36.2	365	9.3	1.3	
2004     4060.9     2920.7     9992     246     34.2     375     9.2       2005     4098.3     3030.4     10467     255     34.5     341     8.3       2006     4139.5     3124.3     10943     264     35.0     350     8.5       2007     4228.3     3189.1     11667     276     36.6     375     8.9	2003	4009.2	2801.0	10210	255	36.5	405	10.1	1.4	
2006         4139.5         3124.3         10943         264         35.0         350         8.5           2007         4228.3         3189.1         11667         276         36.6         375         8.9	2004	4060.9	2920.7	9992	246		375		1.3	
2007 4228.3 3189.1 11667 276 36.6 375 8.9	2005	4098.3	3030.4	10467	255	34.5	341	8.3	1.1	
2007 4228.3 3189.1 11667 276 36.6 375 8.9									1.1	
									1.2	
2008 4268.6 3247.8 11316 265 34.8 331 7.8									1.0	

NOTES: Population: From 1997 the population is the resident population at 30 June - SNZ INFOS series DPEA.SDBC.

\* Vehicles: See Note 16 for details. From 1998 (the first full year with Continuous Vehicle Licensing) vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds but excludes those with an exempt or restoration licence. From 1986 to 1997 vehicle numbers are estimates. Prior to 1986 vehicle numbers were derived from annual licence transactions.



TABLE 2A: CRASH SEVERITY YEAR ENDING 31 DECEMBER

		NUMBER OF	CRASHES		NUMBER OF CASUALTIES				
Year	Fatal	Serious	Minor	Non-injury	Fatal	Serious	Minor		
1985	660	4311	8583	-	747	5406	13506		
1986	656	4206	8600	-	766	5297	13577		
1987	687	4036	8640	-	796	5177	13551		
1988	624	3498	8443	-	727	4371	12983		
1989	649	3067	8336	18384	758	3948	12672		
1990	638	3451	8741	20230	730	4415	13326		
1991	555	3190	8506	20248	651	4056	12839		
1992	542	2717	8394	19563	646	3425	12728		
1993	517	2533	7986	18198	600	3221	11945		
1994	496	2583	8797	18437	580	3268	13332		
1995	502	2473	9245	22306	582	3153	13717		
1996	457	2321	7786	23000	514	2939	11857		
1997	468	2030	6983	23973	539	2611	10764		
1998	435	1899	6435	22904	501	2400	10012		
1999	434	1904	6106	24284	509	2428	9571		
2000	383	1769	5678	23961	462	2243	8719		
2001	395	1918	6552	27114	455	2435	9933		
2002	365	2111	7687	27697	405	2600	11318		
2003	405	2041	8169	27058	461	2578	11794		
2004	375	2022	7970	26393	435	2491	11399		
2005	341	2071	8396	27217	405	2531	11920		
2006	350	2137	8806	28171	393	2629	12545		
2007	375	2116	9551	29317	421	2654	13359		
2008	331	2098	9218	27527	366	2531	12643		

NOTE: Non-injury crash data began nationally in 1989.

TABLE 2B: CRASHES AND CASUALTIES ON OPEN ROADS AND URBAN ROADS YEAR ENDING 31 DECEMBER

		OPEN R	ROADS		ı			
Year	Fatal crashes	Injury Crashes	Deaths	Injuries	Fatal crashes	Injury Crashes	Deaths	Injuries
1985	355	3292	423	5978	305	9602	324	12934
1986	378	3488	464	6310	278	9321	302	12564
1987	417	3638	499	6536	270	9038	297	12192
1988	383	3375	465	6021	241	8566	262	11333
1989	420	3401	505	5983	229	8002	253	10637
1990	396	3699	470	6502	242	8493	260	11239
1991	362	3898	449	6655	193	7798	202	10240
1992	342	3741	429	6377	200	7370	217	9776
1993	344	3554	402	6093	173	6965	198	9073
1994	353	3733	426	6387	143	7647	154	10213
1995	343	4085	407	6730	159	7633	175	10140
1996	308	3652	357	6138	149	6455	157	8658
1997	333	3201	393	5513	135	5812	146	7862
1998	291	3166	350	5393	144	5168	151	7019
1999	320	3139	389	5394	114	4871	120	6605
2000	286	2960	360	4960	97	4487	102	6002
2001	285	3390	342	5593	110	5080	113	6775
2002	265	3773	298	6037	100	6025	107	7881
2003	288	4071	338	6425	117	6139	123	7947
2004	272	4011	322	6198	103	5981	113	7692
2005	248	4238	306	6485	93	6229	99	7966
2006	246	4345	285	6631	104	6598	108	8543
2007	271	4681	315	7032	104	7059	106	9110
2008	243	4325	274	6327	88	6991	92	8847

**NOTES:** For urban/open road classification see Note 11.

Historical data in these tables may not agree exactly with other tables as the data files have been updated prior to the data extraction for these new tables.

TABLE 3: TYPE OF ROAD USER KILLED AND INJURED YEAR ENDING 31 DECEMBER

Year	Dr Motor \	ivers of /ehicles		ngers in Vehicles		Cyclist d Pillion	Pedal	Cyclists	Ped	estrians	Oth	er Road Users	Unkno	own (1)	Total Ca	sualties
						sengers										
1951	1387	(60)	2399	(79)	1117	(47)	1033	(32)	918	(70)	88	(4)	-	(-)	6942	(292)
1952	1590	(49)	2482	(62)	1338	(66)	1077	(31)	902	(64)	54	(-)	-	(-)	7443	(272)
1953	1643	(58)	2686	(72)	1293	(72)	1002	(26)	1012	(83)	52	(2)	-	(-)	7688	(313)
1954	1739	(72)	2700	(90)	1312 1295	(73)	1055	(37)	1019	(87)	51	(1)	-	(-)	7876	(360)
1955	2144	(78)	3161 3605	(67)	1293	(80)	1202	(26)	1114	(81)	61	(1)	-	(-)	8977	(333)
1956	2473	(87)	4098	(99)	1397	(37)	1176	(19)	1173	(86)	49	(1)	-	(-)	9759	(329)
1957 1958	2964 2992	(92) (101)	4148	(103)	1629	(48)	1304 1329	(41)	1243 1272	(98)	39	(2)	-	(-)	11055 11409	(384)
1959	3076	(93)	4307	(99)	1673	(37)	1291	(27)	1313	(93)	43	(-)	-	(-)	11703	(349)
1960	3478	(92)	4685	(123)	1625	(36)	1281	(30)	1347	(92)	28	(1)	-	(-)	12444	(374)
1961	3679	(103)	4757	(113)	1629	(43)	1354	(32)	1341	(101)	37	(1)	-	(-)	12797	(393)
1962	4038	(124)	5087	(108)	1749	(46)	1401	(31)	1447	(88)	55	(1)	_	(-)	13777	(398)
1963	4477	(115)	5409	(110)	1711	(44)	1320	(27)	1517	(95)	46	(3)	_	(-)	14480	(394)
1964	5166	(148)	6204	(116)	2016	(40)	1315	(26)	1524	(97)	44	(1)		(-)	16269	(428)
1965	5570	(181)	6540	(170)	2061	(48)	1289	(33)	1587	(123)	50	(4)	_	(-)	17097	(559)
1966	6144	(196)	7120	(162)	2072	(42)	1205	(29)	1609	(114)	50	(6)	_	(-)	18200	(549)
1967	5944	(198)	6812	(188)	1918	(46)	1132	(25)	1566	(109)	41	(4)	-	(-)	17413	(570)
1968	6282	(174)	6828	(179)	1807	(28)	1083	(24)	1658	(116)	41	(1)	-	(-)	17699	(522)
1969	6566	(204)	7474	(179)	1909	(36)	1039	(33)	1696	(118)	42	(-)	-	(-)	18726	(570)
1970	7701	(269)	8122	(211)	2077	(43)	1041	(28)	1786	(101)	67	(3)	_	(-)	20794	(655)
1971	7558	(253)	8148	(227)	2911	(52)	1083	(29)	1861	(113)	49	(3)	-	(-)	21610	(677)
1972	7324	(260)	8147	(225)	3766	(79)	1029	(22)	1994	(125)	57	(2)	-	(-)	22317	(713)
1973	7682	(273)	8236	(250)	4224	(130)	1018	(30)	2180	(157)	48	(3)	-	(-)	23388	(843)
1974	6819	(225)	6896	(190)	4092	(107)	969	(26)	2024	(125)	32	(3)	-	(-)	20832	(676)
1975	6266	(230)	6000	(170)	3625	(96)	745	(18)	1747	(112)	38	(2)	1420	(-)	19841	(628)
1976	5796	(221)	5746	(180)	3330	(92)	736	(14)	1476	(102)	29	(-)	782	(-)	17895	(609)
1977	5937	(252)	5526	(207)	3016	(98)	631	(21)	1448	(124)	21	(-)	946	(-)	17525	(702)
1978	4990	(228)	4831	(176)	2713	(104)	588	(30)	1224	(116)	7	(-)	825	(-)	15178	(654)
1979	4465	(200)	4071	(140)	2810	(90)	623	(15)	1157	(106)	14	(3)	766	(-)	13906	(554)
1980	5592	(223)	5054	(163)	3222	(91)	741	(22)	1249	(98)	12	(1)	2	(1)	15872	(599)
1981	5509	(223)	4692	(205)	3377	(116)	756	(21)	1123	(104)	20	(-)	2	(-)	15479	(669)
1982	5668	(264)	4934	(177)	3568	(113)	886	(30)	1128	(89)	10	(-)	-	(-)	16194	(673)
1983	6121	(218)	4851	(196)	3451	(108)	912	(19)	1147	(102)	9	(1)	-	(-)	16491	(644)
1984	6687	(217)	4778	(176)	3746	(125)	957	(31)	1343	(119)	12	(1)	1	(-)	17524	(669)
1985	7358	(284)	5240	(185)	3940	(132)	1120	(21)	1229	(125)	10	(-)	15	(-)	18912	(747)
1986	7601	(287)	5382	(218)	3593	(127)	1012	(22)	1268	(112)	17	(-)	1	(-)	18874	(766)
1987	7814	(307)	5196	(216)	3389	(144)	1058	(18)	1261	(110)	10	(-)	-	(-)	18728	(795)
1988	7381	(270)	4862	(206)	2862	(146)	1097	(20)	1122	(83)	15	(2)	7	(-)	17346	(727)
1989	7295	(289)	4722	(224)	2467	(139)	1054	(20)	1044	(81)	12	(1)	-	(-)	16594	(754)
1990	8236	(278)	5054	(205)	2203	(114)	1053	(27)	1161	(104)	12	(1)	-	(-)	17719	(729)
1991	7838	(278)	4858	(183)	2061	(78)	1000	(22)	1015	(88)	5	(1)	-	(-)	16777	(650)
1992	7788	(286)	4564	(179)	1816	(88)	941	(17)	1007	(76)	5	(-)	-	(-)	16121	(646)
1993	7515	(259)	4159	(167)	1561	(80)	910	(17)	949	(74)	14	(3)	-	(-)	15108	(600)
1994	8324	(272)	4606	(166)	1721	(72)	882	(15)	1063	(54)	4	(1)	-	(-)	16600	(580)
1995	8818	(249)	4637	(168)	1539	(78)	813	(15)	1053	(71)	10	(1)	-	(-)	16870	(582)
1996	7653	(238)	4184	(151)	1223	(48)	754	(13)	969	(63)	13	(1)	-	(-)	14796	(514)
1997	6825	(252)	3747	(165)	1142	(56)	724	(12)	925	(54)	12	(-)	-	(-)	13375	(539)
1998	6403	(221)	3471	(139)	969	(54)	626	(16)	930	(71)	13	(-)	-	(-)	12412	(501)
1999	6311	(255)	3367	(141)	791	(42)	619	(8)	895	(63)	16	(-)	-	(-)	11999	(509)
2000	5667	(244)	3068	(132)	697	(31)	559	(19)	953	(35)	18	(1)	-	(-)	10962	(462)
2001	6655	(233)	3336	(125)	669	(35)	696	(10)	986	(52)	26	(-)	-	(-)	12368	(455)
2002	7662	(220)	3641	(96)	744	(30)	771	(14)	1065	(45)	35	(-)	-	(-)	13918	(405)
2003	8204	(235)	3601	(133)	761	(28)	722	(6)	1058	(58)	26	(1)	-	(-)	14372	(461)
2004	8043	(222)	3384	(133)	721	(34)	716	(7)	999	(38)	27	(1)	-	(-)	13890	(435)
2005	8308	(203)	3521	(123)	903	(36)	751	(12)	943	(31)	25	(-)	-	(-)	14451	(405)
2006	8612	(191)	3713	(108)	1017	(38)	833	(9)	960	(44)	39	(3)	-	(-)	15174	(393)
2007	9131	(202)	3758	(119)	1336	(41)	880	(12)	868	(45)	40	(2)	-	(-)	16013	(421)
2008	8536	(163)	3365	(105)	1396	(50)	895	(10)	939	(31)	43	(7)	-	(-)	15174	(366)

**NOTE:** The figures in brackets are the numbers killed and are not included in the adjacent totals. (1) see Note 2.



FIGURE 5: PROPORTION OF DEATHS BY ROAD USER TYPE

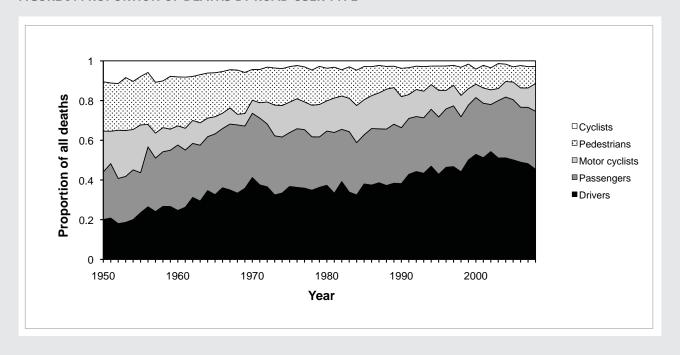
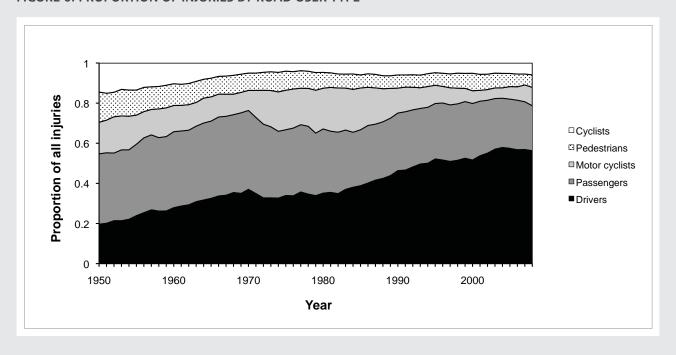


FIGURE 6: PROPORTION OF INJURIES BY ROAD USER TYPE



**TABLE 4: CRASHES IN HOLIDAY PERIODS HISTORICAL** 

	Christmas New Year					Easter		Qu	eens Birthda	ay	Labour Weekend			
Year	Crashes	Casua	ılties	Period (days)	Crashes	Casua	alties	Crashes	Casua	lties	Crashes	Casua	lties	
1956	211	342	(12)	9.6	96	145	(6)	121	202	(1)	90	153	(3)	
1957	244	400	(13)	9.6	158	254	(7)	109	169	(4)	109	170	(3)	
1958	232	358	(15)	11.6	170	275	(13)	121	185	(9)	104	174	(5)	
1959	321	506	(8)	11.6	154	251	(4)	143	214	(2)	122	177	(5)	
1960	252	414	(18)	11.6	155	256	(12)	140	225	(5)	123	210	(5)	
1961	228	346	(13)	11.6	143	235	(8)	107	185	(8)	96	182	(3)	
1962	255	421	(10)	9.6	159	298	(10)	136	221	(6)	130	210	(3)	
1963	276	457	(11)	9.6	179	308	(10)	176	298	(6)	152	251	(8)	
1964	302	500	(13)	11.6	192	340	(11)	178	279	(6)	169	291	(4)	
1965	343	557	(19)	11.6	218	372	(16)	166	256	(7)	153	250	(6)	
1966	448	749	(9)	11.6	236	382	(7)	174	281	(12)	146	269	(10)	
1967	253	399	(20)	11.6	203	306	(13)	171	281	(7)	139	232	(9)	
1968	288	429	(20)	9.6	189	317	(8)	191	317	(7)	169	292	(13)	
1969	403	713	(18)	11.6	176	328	(12)	204	357	(11)	175	298	(9)	
1970	453	824	(26)	11.6	196	367	(8)	144	251	(9)	157	290	(10)	
1971	468	819	(34)	11.6	215	425	(21)	174	284	(6)	170	340	(8)	
1972	477	826	(37)	11.6	234	421	(15)	154	243	(15)	202	363	(10)	
1973	366	585	(16)	9.6	229	415	(16)	210	352	(24)	208	399	(11)	
1974	363	574	(29)	9.6	245	434	(17)	163	257	(15)	194	352	(6)	
1975	401	628	(24)	11.6	202	327	(15)	185	273	(9)	186	290	(12)	
1976	360	584	(19)	11.6	216	346	(11)	165	238	(17)	151	263	(3)	
1977	399	609	(34)	11.6	182	293	(9)	161	240	(7)	148	252	(2)	
1978	244	346	(30)	11.6	158	259	(7)	132	208	(22)	120	205	(16)	
1979	257	416	(13)	9.6	144	219	(10)	105	154	(7)	115	202	(8)	
1980	273	481	(32)	11.6	138	213	(15)	122	197	(7)	139	232	(9)	
1981	356	602	(35)	11.6	136	248	(5)	114	158	(15)	147	266	(10)	
1982	289	473	(18)	11.6	150	240	(13)	144	229	(9)	136	208	(7)	
1983	341	523	(17)	11.6	164	285	(11)	142	211	(5)	144	248	(13)	
1984 1985	338	439 532	(13)	9.6 9.6	160 177	258 291	(15)	134 156	223	(11)	140 133	218 225	(9)	
1986	369	554	(25)	11.6	168	254	(15)	149	239	(12)	146	232	(10)	
1987	344	544	(22)	11.6	163	254	(19)	161	259	(8)	157	243	(6)	
1988	378	594	(16)	11.6	186	283	(12)	132	202	(8)	142	213	(12)	
1989	377	596	(19)	11.6	153	214	(16)	140	202	(13)	120	181	(5)	
1990	313	487	(18)	9.6	155	237	(17)	150	220	(9)	141	225	(9)	
1991	332	537	(17)	9.6	162	238	(12)	119	177	(6)	107	180	(11)	
1992	340	528	(29)	11.6	129	185	(12)	107	177	(9)	133	178	(9)	
1993	244	372	(17)	11.6	103	165	(11)	118	172	(3)	93	149	(8)	
1994	339	542	(19)	11.6	141	228	(10)	134	214	(7)	134	191	(7)	
1995	380	598	(26)	11.6	137	192	(9)	120	189	(2)	143	220	(7)	
1996	272	432	(14)	9.6	141	229	(7)	120	186	(10)	100	153	(5)	
1997	248	387	(26)	11.6	132	218	(6)	108	156	(7)	80	119	(5)	
1998	247	391	(24)	11.6	109	176	(3)	90	134	(4)	82	124	(8)	
1999	249	398	(17)	11.6	99	145	(7)	76	109	(8)	87	139	(6)	
2000	251	409	(20)	11.6	96	134	(6)	74	96	(7)	79	141	(7)	
2001	250	417	(21)	9.6	101	161	(4)	83	125	(5)	101	142	(6)	
2002	222	323	(17)	9.6	126	214	(3)	94	141	(3)	98	135	(3)	
2003	272	408	(13)	11.6	126	190	(3)	84	131	(4)	80	117	(3)	
2004	318	513	(11)	11.6	122	170	(4)	112	146	(4)	87	136	(5)	
2005	313	488	(22)	11.6	142	209	(9)	99	136	(3)	85	112	(3)	
2006	294	444	(9)	11.6	119	170	(5)	106	154	(3)	128	199	(3)	
2007	266	413	(17)	9.6	144	206	(6)	129	188	(5)	100	145	(4)	
2008	-	-	(-)	-	142	196	(9)	119	167	(3)	101	159	(4)	
		1	\ /			.,,,	(-)		,	(-)			( . /	

**NOTES:** The figures in brackets are the numbers killed and are not included in the adjacent injury figures. For the Christmas - New Year holiday period the year refers to the year in which the holiday period began. The number of days covered by the Christmas holiday period can vary. For the other three holiday periods the number of days is the same for all years. See also Note 14.



# **SECTION 2: CASUALTIES AND CRASHES**

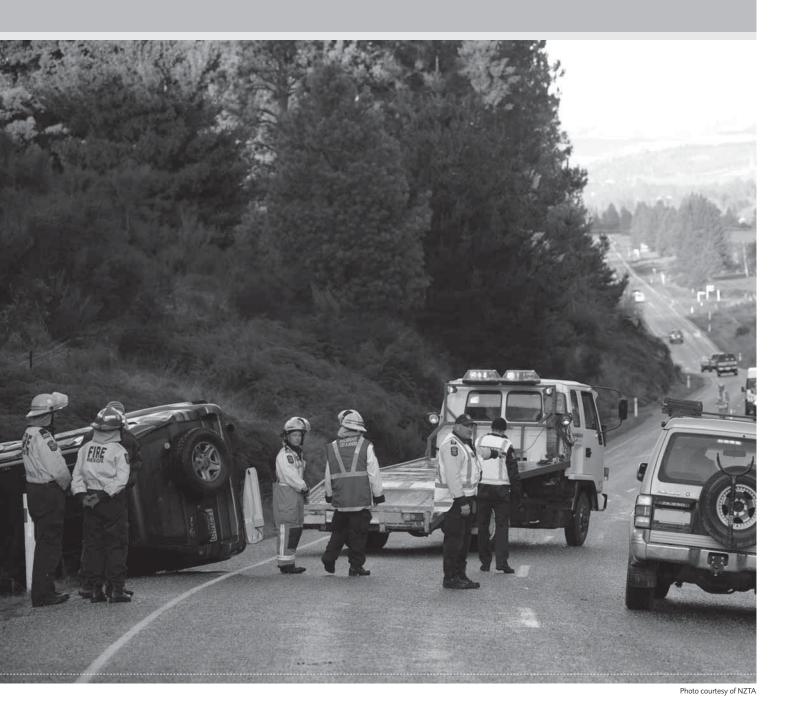


TABLE 5: AGE AND SEX OF ROAD USERS KILLED AND INJURED YEAR ENDING 31 DECEMBER 2008

Age group	Fem	ales	Ma	les	Unkr	ıown	Total ca	sualties
Under 5	67	(6)	90	(4)	2	(-)	159	(10)
5 to 9	125	(1)	194	(3)	2	(-)	321	(4)
10 to 14	229	(3)	290	(6)	3	(-)	522	(9)
15 to 19	1121	(21)	1628	(35)	2	(-)	2751	(56)
20 to 24	893	(15)	1299	(46)	3	(-)	2195	(61)
25 to 29	555	(9)	787	(26)	-	(-)	1342	(35)
30 to 34	474	(6)	577	(20)	1	(-)	1052	(26)
35 to 39	478	(6)	628	(14)	1	(-)	1107	(20)
40 to 44	457	(6)	641	(12)	-	(-)	1098	(18)
45 to 49	425	(6)	545	(14)	2	(-)	972	(20)
50 to 54	377	(5)	462	(12)	-	(-)	839	(17)
55 to 59	291	(5)	332	(13)	1	(-)	624	(18)
60 to 64	221	(7)	254	(10)	-	(-)	475	(17)
65 to 69	160	(5)	172	(7)	-	(-)	332	(12)
70 to 74	137	(1)	148	(7)	-	(-)	285	(8)
75 to 79	125	(9)	118	(5)	-	(-)	243	(14)
80 and over	165	(8)	138	(8)	-	(-)	303	(16)
Unknown age	212	(2)	287	(3)	55	(-)	554	(5)
TOTALS	6512	(121)	8590	(245)	72	(-)	15174	(366)

**NOTE**: The figures in brackets are the numbers killed and are not included in the adjacent totals.

TABLE 6: AGE AND TYPES OF ROAD USERS KILLED AND INJURED YEAR ENDING 31 DECEMBER 2008

Age group years	Driv	/ers	Passe	ngers	Motor Driv		Motor Pilli		Pedal C	yclists	Pedes	trians	Other use		Total ca	sualties
Under 5	-	(-)	125	(8)	-	(-)	-	(1)	3	(-)	30	(1)	1	(-)	159	(10)
5 to 9	-	(-)	211	(3)	2	(-)	1	(-)	26	(-)	76	(1)	5	(-)	321	(4)
10 to 14	19	(1)	249	(5)	14	(-)	13	(-)	116	(-)	108	(2)	3	(1)	522	(9)
15 to 19	1436	(19)	886	(27)	189	(7)	14	(-)	108	(1)	115	(2)	3	(-)	2751	(56)
20 to 24	1316	(32)	511	(18)	211	(6)	8	(-)	63	(1)	82	(4)	4	(-)	2195	(61)
25 to 29	852	(16)	239	(11)	122	(6)	6	(-)	68	(-)	55	(2)	-	(-)	1342	(35)
30 to 34	689	(14)	129	(5)	115	(4)	5	(-)	67	(1)	46	(2)	1	(-)	1052	(26)
35 to 39	725	(8)	123	(5)	138	(4)	10	(1)	70	(-)	40	(2)	1	(-)	1107	(20)
40 to 44	689	(12)	115	(-)	132	(4)	3	(-)	104	(-)	54	(2)	1	(-)	1098	(18)
45 to 49	628	(11)	79	(2)	143	(4)	9	(-)	71	(2)	42	(1)	-	(-)	972	(20)
50 to 54	558	(10)	77	(-)	102	(5)	5	(-)	59	(-)	38	(2)	-	(-)	839	(17)
55 to 59	415	(9)	79	(3)	64	(3)	3	(-)	41	(1)	21	(2)	1	(-)	624	(18)
60 to 64	321	(5)	62	(9)	31	(-)	3	(-)	30	(2)	26	(1)	2	(-)	475	(17)
65 to 69	222	(8)	47	(-)	17	(3)	1	(-)	11	(1)	33	(-)	1	(-)	332	(12)
70 to 74	189	(1)	53	(2)	6	(1)	-	(-)	9	(1)	23	(3)	5	(-)	285	(8)
75 to 79	171	(6)	34	(4)	5	(-)	-	(-)	3	(-)	29	(3)	1	(1)	243	(14)
80 and over	204	(7)	54	(2)	1	(1)	-	(-)	2	(-)	31	(1)	11	(5)	303	(16)
Unknown age	102	(4)	292	(1)	22	(-)	1	(-)	44	(-)	90	(-)	3	(-)	554	(5)
TOTALS	8536	(163)	3365	(105)	1314	(48)	82	(2)	895	(10)	939	(31)	43	(7)	15174	(366)

**NOTE:** The figures in brackets are the numbers killed and are not included in the adjacent totals.

(1) Includes unknown.

FIGURE 7: PERCENTAGE OF ROAD DEATHS BY AGE AND SEX

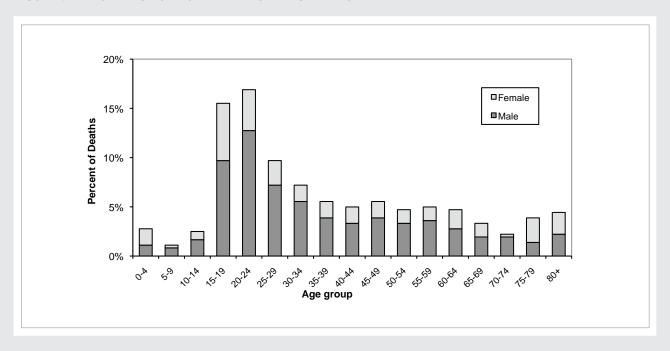


FIGURE 8: PERCENTAGE OF ROAD INJURIES BY AGE AND SEX

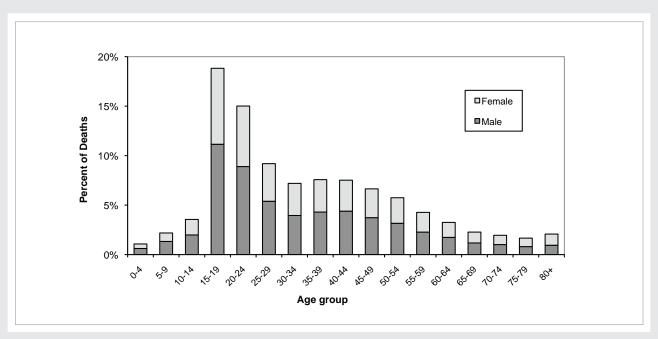
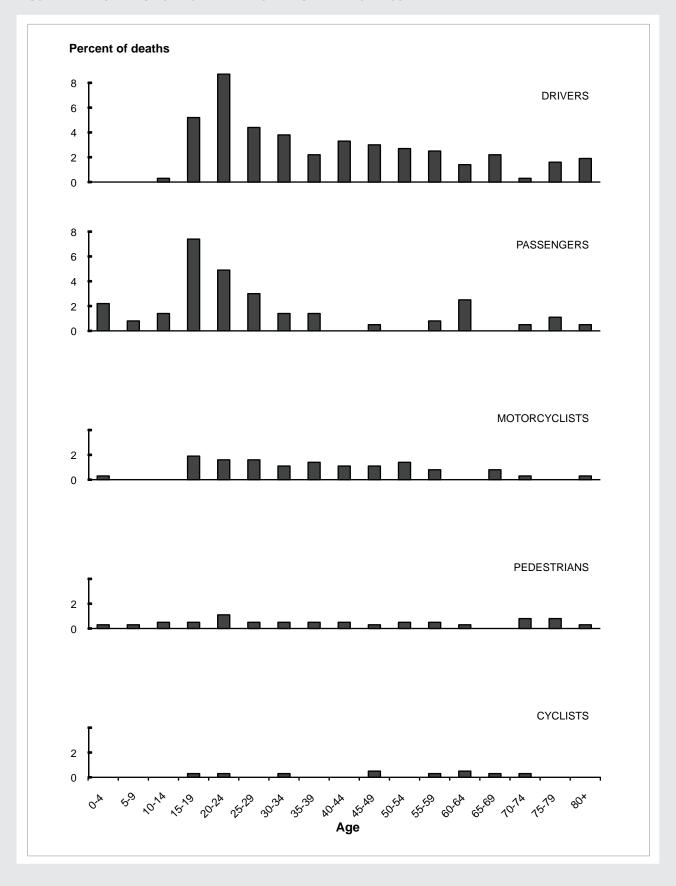


FIGURE 9: PERCENTAGE OF ROAD DEATHS BY AGE AND ROAD USER TYPE



### FIGURE 10: PERCENTAGE OF ROAD INJURIES BY AGE AND ROAD USER TYPE

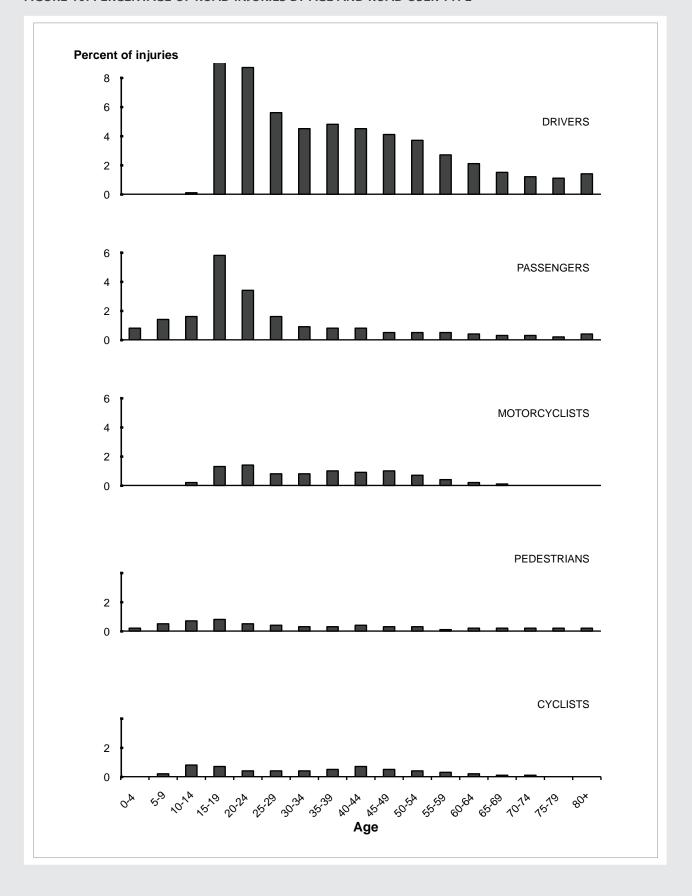


TABLE 7: TYPE OF ROAD USER KILLED AND INJURED YEAR ENDING 31 DECEMBER 2008

Type of road user	Killed	Serious Injury	Minor Injury	Totals
DRIVERS OF:				
Car	128	813	5882	6823
Taxi	-	5	30	35
SUV	19	82	696	797
Van	10	107	570	687
Truck	5	52	250	307
Bus	-	4	24	28
Motorcycle	48	430	884	1362
Other	1	6	15	22
Unknown	-	-	-	-
SUBTOTAL	211	1499	8351	10061
PASSENGERS FROM:				
Car	82	397	2077	2556
Taxi	-	-	13	13
SUV	10	61	304	375
Van	9	72	319	400
Truck	2	11	60	73
Bus	1	6	40	47
Motorcycle	2	26	56	84
Other	1	2	6	9
Unknown	-	-	-	-
SUBTOTAL	107	575	2875	3557
OTHER ROAD USERS:				
Pedal Cyclists	10	185	707	902
Pedestrian	31	261	678	970
Other & Unknown	7	11	32	50
SUBTOTAL	48	457	1417	1922
TOTAL ALL CASUALTIES	366	2531	12643	15540

FIGURE 11: TYPE OF ROAD USER KILLED AND INJURED

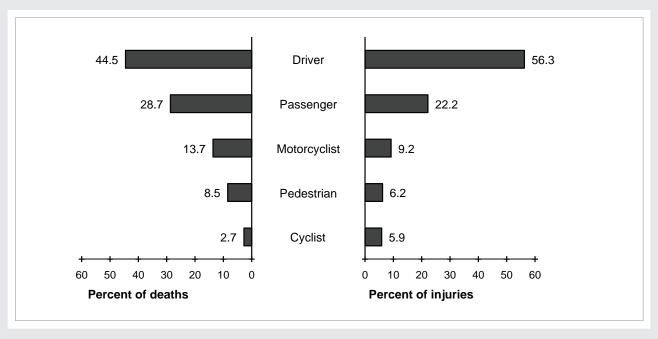


TABLE 8: TYPE OF ROAD USERS KILLED AND INJURED IN EACH SPEED LIMIT AREA **DURING DAYLIGHT AND DARKNESS** YEAR ENDED 31 DECEMBER 2008

ROAD USER	5(	) KM/H	OR LES	is		60 - 70	KM/H			80 - 100	KM/H		UNKN SPEED / LIG	LIMIT		ТОТА	LS	
	Da	ay	Da	ırk	Da	ıy	Da	rk	Da	ıy	Da	ırk			Day	,	Da	rk
DRIVERS OF:																		
Car	2241	(7)	1178	(10)	300	(3)	151	(5)	1838	(58)	987	(45)	-	(-)	4379	(68)	2316	(60)
Taxi	12	(-)	14	(-)	3	(-)	-	(-)	5	(-)	1	(-)	-	(-)	20	(-)	15	(-)
SUV	181	(-)	90	(-)	20	(-)	17	(-)	335	(8)	135	(11)	-	(-)	536	(8)	242	(11)
Van	168	(-)	77	(1)	32	(-)	11	(-)	258	(7)	131	(2)	-	(-)	458	(7)	219	(3)
Truck	50	(-)	7	(-)	11	(-)	6	(-)	155	(4)	73	(1)	-	(-)	216	(4)	86	(1)
Bus	13	(-)	2	(-)	2	(-)	-	(-)	8	(-)	3	(-)	-	(-)	23	(-)	5	(-)
Motorcycle	589	(5)	188	(6)	49	(1)	24	(1)	390	(29)	74	(6)	-	(-)	1028	(35)	286	(13)
Other	6	(1)	3	(-)	2	(-)	-	(-)	8	(-)	2	(-)	-	(-)	16	(1)	5	(-)
Unknown	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
SUBTOTAL	3260	(13)	1559	(17)	419	(4)	209	(6)	2997	(106)	1406	(65)	-	(-)	6676	(123)	3174	(88)
PASSENGERS FROM:																		
Car	625	(2)	477	(11)	95	(1)	91	(3)	761	(34)	425	(31)	-	(-)	1481	(37)	993	(45)
Taxi	3	(-)	5	(-)	-	(-)	-	(-)	4	(-)	1	(-)	-	(-)	7	(-)	6	(-)
SUV	49	(-)	52	(-)	10	(-)	12	(-)	173	(4)	69	(6)	-	(-)	232	(4)	133	(6)
Van	65	(1)	46	(1)	30	(-)	7	(-)	170	(2)	73	(5)	-	(-)	265	(3)	126	(6)
Truck	8	(-)	3	(-)	3	(-)	1	(-)	41	(1)	15	(1)	-	(-)	52	(1)	19	(1)
Bus	15	(-)	-	(-)	8	(-)	1	(-)	16	(1)	6	(-)	-	(-)	39	(1)	7	(-)
Motorcycle	20	(1)	9	(-)	1	(-)	3	(-)	44	(1)	5	(-)	-	(-)	65	(2)	17	(-)
Other	5	(1)	1	(-)	1	(-)	-	(-)	1	(-)	-	(-)	-	(-)	7	(1)	1	(-)
Unknown	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
SUBTOTAL	790	(5)	593	(12)	148	(1)	115	(3)	1210	(43)	594	(43)	-	(-)	2148	(49)	1302	(58)
OTHER ROAD USERS:																		
Pedal Cyclists	650	(4)	120	(1)	33	(-)	8	(-)	74	(4)	7	(1)	-	(-)	757	(8)	135	(2)
Pedestrian	634	(7)	236	(8)	20	(4)	10	(1)	29	(3)	10	(8)	-	(-)	683	(14)	256	(17)
Other & Unknown	37	(5)	6	(1)	-	(-)	-	(-)	-	(1)	-	(-)	-	(-)	37	(6)	6	(1)
SUBTOTAL	1321	(16)	362	(10)	53	(4)	18	(1)	103	(8)	17	(9)	-	(-)	1477	(28)	397	(20)
TOTAL	5371	(34)	2514	(39)	620	(9)	342	(10)	4310	(157)	2017	(117)	-	(-)	10301	(200)	4873	(166)

**NOTE:** The figures in brackets are numbers killed and are not included in the adjacent totals.



TABLE 9: MOVEMENT CLASSIFICATION OF CRASHES AND NUMBER OF CASUALTIES YEAR ENDING 31 DECEMBER 2008

	Number of crashes	5	Number of casua	alties		
Movement classification	Injury	Fatal	Killed	Serious	Minor	Total
Overtaking or lane change	402	12	14	108	420	542
Head on (not overtaking)	630	74	91	331	875	1297
LOSS CONTROL OR OFF ROAD:						
On straight	1246	47	52	333	1322	1707
While cornering	2610	107	116	686	2812	3614
Collision with obstruction	442	4	4	77	436	517
Rear end	1213	6	6	72	1534	1612
INTERSECTIONS OR DRIVEWAYS:						
Turning versus same direction	578	1	1	86	666	753
Crossing no turns	792	12	12	139	982	1133
Crossing vehicle turning	794	11	12	146	917	1075
Vehicles merging	260	2	2	38	283	323
Right turn against	865	10	10	155	1063	1228
Vehicle manoeuvring	533	3	3	89	565	657
Pedestrian crossing road	727	20	20	198	583	801
Pedestrian other	132	14	14	37	106	157
Miscellaneous	92	8	9	36	79	124
TOTALS	11316	331	366	2531	12643	15540

FIGURE 12: MOVEMENT CLASSIFICATION OF CRASHES

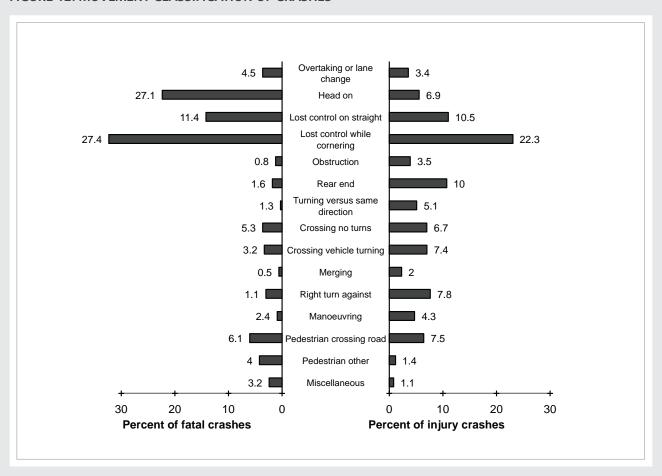
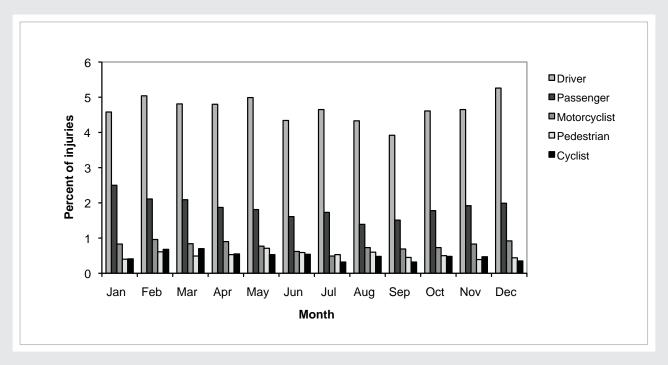


TABLE 10: CASUALTIES AND CRASHES EACH MONTH YEAR ENDED 31 DECEMBER 2008

							CASU	ALTIES								CRASHES			
Month	Driver		Passen	ger	Motor cyclist	(1)	Pedest	rian	Pedal c	yclist	Other (	(2)	Totals		Numbe	r	Daily average		
January	700	(12)	378	(11)	124	(5)	58	(4)	61	(2)	6	(1)	1327	(35)	907	(34)	29		
February	765	(18)	313	(15)	146	(3)	91	(4)	106	(-)	7	(1)	1428	(41)	1054	(35)	36		
March	732	(16)	312	(13)	127	(3)	76	(-)	109	(-)	2	(-)	1358	(32)	1024	(26)	33		
April	731	(15)	285	(6)	138	(2)	80	(3)	86	(-)	1	(2)	1321	(28)	1012	(27)	34		
May	764	(11)	272	(10)	115	(5)	105	(5)	82	(-)	1	(1)	1339	(32)	1005	(30)	34		
June	659	(15)	243	(7)	94	(2)	89	(3)	82	(2)	2	(-)	1169	(29)	898	(26)	29		
July	713	(10)	263	(6)	74	(2)	79	(3)	50	(-)	3	(-)	1182	(21)	884	(21)	29		
August	663	(10)	211	(5)	108	(5)	94	(-)	71	(3)	6	(-)	1153	(23)	895	(19)	29		
September	600	(9)	226	(9)	104	(4)	69	(1)	48	(1)	3	(-)	1050	(24)	798	(21)	27		
October	706	(11)	271	(6)	109	(4)	75	(3)	73	(1)	3	(1)	1237	(26)	913	(22)	29		
November	712	(10)	293	(6)	121	(8)	59	(1)	72	(1)	6	(-)	1263	(26)	944	(26)	31		
December	791	(26)	298	(11)	136	(7)	64	(4)	55	(-)	3	(1)	1347	(49)	982	(44)	32		
TOTALS	8536	(163)	3365	(105)	1396	(50)	939	(31)	895	(10)	43	(7)	15174	(366)	11316	(331)	31		

 $\textbf{NOTES:} \ The \ figures \ in \ brackets \ are \ numbers \ killed \ or \ the \ number \ of \ fatal \ crashes \ and \ are \ not \ included \ in \ the \ adjacent \ totals.$ 

FIGURE 13: PERCENTAGE OF ROAD INJURIES BY MONTH AND TYPE OF ROAD USER





<sup>(1)</sup> Includes pillion passengers

<sup>(2)</sup> Includes unknown road user types.

FIGURE 14: CRASH MOVEMENT CLASSIFICATION DIAGRAM

	TYPE	Α	В	С	D	Е	F	G	Ο
Α	OVERTAKING AND LANE CHANGE	PULLING OUT OR CHANGING LANE TO RIGHT	HEAD ON	CUTTING IN OR CHANGING LANE TO LEFT	LOST CONTROL (OVERTAKING VEHICLE)	SIDE ROAD	LOST CONTROL (OVERTAKEN VEHICLE)	WEAVING IN HEAVY TRAFFIC	OTHER
В	HEAD ON	ON STRAIGHT	CUTTING CORNER	SWINGING WIDE	BOTH OR UNKNOWN	LOST CONTROL ON STRAIGHT	LOST CONTROL ON CURVE		OTHER
С	LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)	OUT OF CONTROL ON ROADWAY	OFF ROADWAY TO LEFT	OFF ROADWAY TO RIGHT					OTHER
D	CORNERING	LOST CONTROL TURNING RIGHT	LOST CONTROL TURNING LEFT	MISSED INTERSECTION OR END OF ROAD					OTHER
E	COLLISION WITH OBSTRUCTION	PARKED VEHICLE	CRASH OR BROKEN DOWN	NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)	WORKMANS VEHICLE	OPENING DOOR			OTHER
F	REAR END	SLOWER VEHICLE	CROSS TRAFFIC	PEDESTRIAN	QUEUE	SIGNALS T	→ → △ OTHER		OTHER
G	TURNING VERSUS SAME DIRECTION	REAR OF LEFT TURNING VEHICLE	LEFT TURN SIDE SIDE SWIPE	STOPPED OR TURNING FROM LEFT SIDE	NEAR CENTRE LINE	OVERTAKING VEHICLE	TWO TURNING		OTHER
Н	CROSSING (NO TURNS)	RIGHT ANGLE (70° TO 110°)							OTHER
J	CROSSING (VEHICLE TURNING)	RIGHT TURN RIGHT SIDE	OBSOLETE	TWO TURNING					OTHER
K	MERGING	LEFT TURN IN	RIGHT TURN IN	TWO TURNING					OTHER
L	RIGHT TURN AGAINST	STOPPED WAITING TO TURN	MAKING TURN						OTHER
Μ	MANOEUVRING	PARKING OR LEAVING	"U" TURN	"U" TURN	DRIVEWAY MANOEUVRE	PARKING	ENTERING OR LEAVING	REVERSING ALONG ROAD	OTHER
N	PEDESTRIANS CROSSING ROAD	LEFT SIDE	RIGHT SIDE	LEFT TURN LEFT SIDE	RIGHT TURN RIGHT SIDE	LEFT TURN RIGHT SIDE	RIGHT TURN LEFT SIDE	MANOEUVRING VEHICLE	OTHER
P	PEDESTRIANS OTHER	WALKING WITH TRAFFIC	WALKING FACING TRAFFIC	WALKING ON FOOTPATH	CHILD PLAYING (INCLUDING TRICYCLE)	ATTENDING TO VEHICLE	ENTERING OR LEAVING VEHICLE		OTHER
Q	MISCELLANEOUS	>+o/ FELL WHILE BOARDING OR ALIGHTING	>HO/ FELL FROM MOVING VEHICLE	TRAIN	PARKED VEHICLE RAN AWAY	EQUESTRIAN	>+o -> FELL INSIDE VEHICLE	TRAILER OR LOAD	OTHER

**NOTE:** \* = Movement applies for left and right hand bends, curves or turns.

TABLE 11: CRASHES CLASSIFIED BY TYPE OF MOVEMENT

	TYPE	А	В	С	D	E	F	G	О	TOTAL
Α	Overtaking or lane change	114	36	105	86	3	24	4	42	414
В	Head on – not overtaking	111	81	149	17	74	265		7	704
С	Lost control – straight road	143	680	461					9	1293
D	Cornering	1495	1109	113						2717
E	Collision with obstruction	235	14	105	2	74			16	446
F	Rear end collision	195	81	66	691	140	39		7	1219
G	Turning versus same direction	53	74	70	258	95	16		13	579
Н	Crossing no turns	796							8	804
J	Crossing vehicle turning	763		24					18	805
К	Vehicles merging	149	95	13					5	262
L	Right turn against	4	867						4	875
М	Vehicle manoeuvring	52	44	224	55	8	14	14	125	536
N	Pedestrain crossing road	338	201	38	48	13	62	33	14	747
Р	Pedestrain other	20	3	29	2	14	10		68	146
Q	Miscellaneous	6	30	9	13	1	4	27	10	100
								TOTAL C	RASHES	11647

 $\label{NOTE:See Figure 14} \textbf{NOTE:} See Figure 14 for a diagrammatic representation of this table.$ 



TABLE 12: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING CARS, SUVS, VANS, TAXIS ETC

	ТҮРЕ	А	В	С	D	Е	F	G	О	TOTAL
^	Overtaking or lane change	83	34	71	69	2	14	3	26	302
A	Overtaking of lane change	72	32	54	24	3	6	3	11	205
D.	Head on the second disc.	106	65	123	13	66	236		5	614
В	Head on – not overtaking	87	63	116	13	60	217		5	561
		79	610	430					5	1124
С	Lost control – straight road	35	85	57					3	180
D	Camanina	1220	939	100						2259
U	Cornering	93	84	20						197
-	Callisian with all about this	199	13	68	2	7			8	297
E	Collision with obstruction	191	12	14	1	70			7	295
_	D 1 III .	162	72	54	622	124	30		5	1069
F	Rear end collision	133	73	61	666	129	31		5	1098
_		45	17	37	209	49	6		6	369
G	Turning versus same direction	48	64	50	241	84	10		9	506
		698							7	705
Н	Crossing no turns	633							1	634
		530		19					4	553
J	Crossing vehicle turning	709		13					15	737
.,		61	73	12					3	149
K	Vehicles merging	140	72	9					4	225
	8:1::	1	569						1	571
L	Right turn against	4	800						3	807
		27	21	136	21	1	7	12	101	326
M	Vehicle manoeuvring	49	39	208	46	8	14	10	42	416
		304	191	32	4	13	57	32	12	681
N	Pedestrain crossing road	0	0	1		0	0	0	0	1
	B. L	19	1	28	2	11	9		58	128
P	Pedestrain other	0	0	0	0	1	2		1	4
Q	AA: II	4	20	8	8	1	2	15	9	67
	Miscellaneous	1	1	0	3	0	2	6	1	14
								TOTAL C	RASHES	9214
										5880

**NOTE:** See Figure 14 for a diagrammatic representation of this table.

Top Figure in each cell is the 'KEY' vehicle (DARK ARROW). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.

TABLE 13: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING BUSES AND TRUCKS

	ТҮРЕ	А	В	С	D	E	F	G	О	TOTAL
A	Overtaking or lane change	7	1	25	0		8		9	50
^	Overtaking of falle change	15	4	7	4		3		6	39
В	Head on – not overtaking	2	5	5	1	5	8		1	27
	riead off – not overtaking	22	7	23	2	13	44		0	111
С	Lost control – straight road	6	25	16					0	47
	LOSE CONTROL Straight Toda	6	6	9					1	22
D	Cornering	92	43	0						135
		12	5	5						22
E	Collision with obstruction	9	1	9	0	5			3	27
		43	1	3	1	2			1	51
F	Rear end collision	13	9	2	41	13	4		2	84
		22	3	1	17	4	5		0	52
G	Turning versus same direction	1	2	13	27	4	6		1	54
		3	8	7	11	4	0		2	35
н	Crossing no turns	27								27
		31								31
J	Crossing vehicle turning	44		2					0	46
		22		3					3	28
К	Vehicles merging	13	8	0					1	22
		4	1	1					0	6
L	Right turn against		35							35
			35							35
М	Vehicle manoeuvring	4	2	17	2			0	4	29
	-	2	3	6	6			2	4	23
N	Pedestrain crossing road	21	2	4	8		5	1	1	42
		0	0	0	0	_	0	0	0	0
Р	Pedestrain other	1	2	1		3	1		9	17
		0	0	0	_	0	0		0	0
Q	Miscellaneous	2	4	1	5		2	11	1	26
		0	0	0	0		0	1	1	2
								TOTAL C	RASHES	668
										457

**NOTE:** See Figure 14 for a diagrammatic representation of this table.

Top Figure in each cell is the 'KEY' vehicle (DARK ARROW). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.



TABLE 14: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING MOTORCYCLES

	ТҮРЕ	А	В	С	D	Е	F	G	О	TOTAL
	Outside live and an advance	5	1	6	17	1	1	1	2	34
Α	Overtaking or lane change	17	0	17	1	0	3	0	5	43
В	Head on – not overtaking	2	6	18	3	3	17		1	50
Ь	nead on – not overtaking	2	4	9	2	0	3		0	20
С	Lost control – straight road	56	45	15					4	120
	Lost control – straight road	2	0	1					0	3
D	Cornering	181	127	11						319
	Comerning	6	2	0						8
Е	Collision with obstruction	7		28		1			4	40
	Compon with obstruction	1		0		0			1	2
F	Rear end collision	18	0	8	25	3	3			57
	real end compon	17	4	3	6	7	2			39
G	Turning versus same direction	4	17	18	20	38	3		1	101
	Tarring Versus sume direction	2	0	1	4	4	1		0	12
н	Crossing no turns	24								24
	Crossing no tarns	49								49
J	Crossing vehicle turning	103		0					1	104
		15		5					0	20
K	Vehicles merging	10	12	1					1	24
		2	7	3					1	13
L	Right turn against	2	153						1	156
	The state of the s	0	15						1	16
м	Vehicle manoeuvring	11	14	59	7	5	3	2	7	108
	vernore managed manage	0	2	4	0	0	0	0	3	9
N	Pedestrain crossing road	13	8	2					1	24
		0	0	0					0	0
Р	Pedestrain other									
	Missellaneous		6					1		7
Q	Miscellaneous		0					1		1
								TOTAL C	RASHES	1168
										235

 $\label{NOTE:See Figure 14} \textbf{NOTE:} See Figure 14 for a diagrammatic representation of this table.$ 

Top figure in each cell is the 'KEY' vehicle (DARK ARROW). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.

TABLE 15: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING PEDAL CYCLES

	ТҮРЕ	А	В	С	D	E	F	G	0	TOTAL
		19		3	0		1		5	28
Α	Overtaking or lane change	5		26	2		10		17	60
В	Hand on the conduction	1	5	3		0	4		0	13
В	Head on – not overtaking	0	6	1		1	1		2	11
С	Lost control – straight road	2	0	0						2
	Lost control – straight road	0	2	1						3
D	Cornering	2		2						4
	Comerning	4		0						4
Е	Collision with obstruction	19		0		61			1	81
		0		1		0			0	1
F	Rear end collision	2	0	2	3		2		0	9
		22	1	0	2		1		2	28
G	Turning versus same direction	3	38	2	2	4	1		5	55
	ŭ .	0	2	12	2	3	5		2	26
н	Crossing no turns	46							1	47
	<u> </u>	80							6	86
J	Crossing vehicle turning	84		3					13	100
		17		3					0	20
K	Vehicles merging	64	2							66
		3	14							17
L	Right turn against	1	109						1	111
		10	17 7	12	25	2	4	0	13	73
М	Vehicle manoeuvring			5	25	0	0	1	13	
		1 0	0	0	2	0	0	1	13	22
N	Pedestrain crossing road	1	1	1		1				4
		'	<u>'</u>	<u>'</u>		<u>'</u>				
Р	Pedestrain other									
			0					0	0	0
Q	Miscellaneous		1					2	1	4
								TOTAL C	RASHES	589
										303

**NOTE:** See Figure 14 for a diagrammatic representation of this table.

Top figure in each cell is the 'KEY' vehicle (DARK ARROW). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.



TABLE 16: MOVEMENT CLASSIFICATION OF INJURY CRASHES ON OPEN AND URBAN ROADS

YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	;		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	157	1.4	28	245	2.2	63	-	402
Head on (not overtaking)	269	2.4	92	361	3.2	88	-	630
LOSS CONTROL OR OFF ROAD:								
On straight	516	4.6	260	730	6.5	321	-	1246
While cornering	949	8.4	536	1661	14.7	670	-	2610
Collision with obstruction	325	2.9	120	117	1	78	-	442
Rear end	739	6.5	134	474	4.2	90	-	1213
INTERSECTIONS OR DRIVEWAYS:								
Turning versus same direction	412	3.6	73	166	1.5	17	-	578
Crossing no turns	712	6.3	176	80	0.7	9	-	792
Crossing vehicle turning	634	5.6	134	160	1.4	23	-	794
Vehicles merging	213	1.9	38	47	0.4	9	-	260
Right turn against	715	6.3	214	150	1.3	26	-	865
Vehicle manoeuvring	461	4.1	91	72	0.6	13	-	533
Pedestrian crossing road	713	6.3	184	14	0.1	2	-	727
Pedestrian other	119	1.1	43	13	0.1	7	-	132
Miscellaneous	57	0.5	17	35	0.3	7	-	92
TOTALS	6991	61.8	2140	4325	38.2	1423	-	11316

**NOTE:** Fatal crashes are not included in this table (see Table 17).

TABLE 17: MOVEMENT CLASSIFICATION OF FATAL CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	;		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	4	1.2	2	8	2.4	3	-	12
Head on (not overtaking)	5	1.5	3	69	20.8	19	-	74
LOSS CONTROL OR OFF ROAD:								
On straight	13	3.9	8	34	10.3	11	-	47
While cornering	18	5.4	12	89	26.9	56	-	107
Collision with obstruction	2	0.6	1	2	0.6	2	-	4
Rear end	1	0.3	1	5	1.5	1	-	6
INTERSECTIONS OR DRIVEWAYS:								
Turning versus same direction	-	-	-	1	0.3	-	-	1
Crossing no turns	8	2.4	3	4	1.2	1	-	12
Crossing vehicle turning	3	0.9	1	8	2.4	1	-	11
Vehicles merging	1	0.3	-	1	0.3	1	-	2
Right turn against	5	1.5	4	5	1.5	1	-	10
Vehicle manoeuvring	2	0.6	-	1	0.3	-	-	3
Pedestrian crossing road	16	4.8	5	4	1.2	2	-	20
Pedestrian other	7	2.1	4	7	2.1	6	-	14
Miscellaneous	3	0.9	1	5	1.5	-	-	8
TOTALS	88	26.6	45	243	73.4	104	-	331

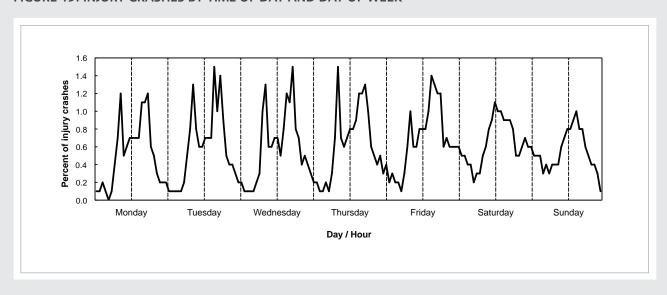
**NOTES:** For movement classification see Note 9 (a). For area classification see Note 11.

TABLE 18: INJURY CRASHES BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2008

Time of Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	16	12	18	25	40	64	66	241
1am to 1.59am	7	14	16	20	25	60	60	202
2am to 2.59am	17	13	11	13	29	53	58	194
3am to 3.59am	6	9	6	16	17	41	54	149
4am to 4.59am	5	13	11	17	19	45	36	146
5am to 5.59am	12	22	19	16	16	25	43	153
6am to 6.59am	44	54	38	34	33	34	36	273
7am to 7.59am	78	87	108	82	62	31	40	488
8am to 8.59am	140	150	142	164	117	60	44	817
9am to 9.59am	57	86	71	81	72	70	46	483
10am to 10.59am	63	72	63	72	72	88	66	496
11am to 11.59am	77	73	83	74	87	101	81	576
noon to 12.59am	81	75	81	86	90	121	86	620
1pm to 1.59pm	82	83	60	85	89	113	86	598
2pm to 2.59pm	82	83	95	97	114	118	98	687
3pm to 3.59pm	128	165	139	137	154	98	112	933
4pm to 4.59pm	120	109	125	132	142	105	93	826
5pm to 5.59pm	135	153	173	148	139	101	94	943
6pm to 6.59pm	66	98	87	109	133	90	67	650
7pm to 7.59pm	61	57	77	67	73	61	59	455
8pm to 8.59pm	35	48	49	54	78	56	47	367
9pm to 9.59pm	25	49	54	48	70	62	43	351
10pm to 10.59pm	18	35	49	60	66	79	30	337
11pm to 11.59pm	25	28	37	29	66	69	10	264
Unknown time	5	11	6	7	15	13	10	67
TOTALS	1385	1599	1618	1673	1818	1758	1465	11316

**NOTE**: Fatal crashes are not included in this table (see Table 19).

FIGURE 15: INJURY CRASHES BY TIME OF DAY AND DAY OF WEEK





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TABLE 19: FATAL CRASHES BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2008

Time of Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	-	-	1	1	1	3	6	12
1am to 1.59am	-	1	3	1	1	1	4	11
2am to 2.59am	-	-	-	1	4	4	3	12
3am to 3.59am	-	-	-	-	1	5	2	8
4am to 4.59am	-	-	2	3	1	2	1	9
5am to 5.59am	-	1	1	-	1	-	3	6
6am to 6.59am	3	1	-	1	2	2	3	12
7am to 7.59am	1	3	1	-	-	1	1	7
8am to 8.59am	3	-	1	2	1	1	-	8
9am to 9.59am	2	-	-	-	-	2	1	5
10am to 10.59am	2	1	4	1	1	2	3	14
11am to 11.59am	-	3	5	-	1	1	2	12
noon to 12.59am	1	2	5	-	4	1	4	17
1pm to 1.59pm	2	3	2	1	1	4	1	14
2pm to 2.59pm	3	3	1	5	2	6	4	24
3pm to 3.59pm	3	4	2	2	4	2	4	21
4pm to 4.59pm	5	1	4	4	1	7	3	25
5pm to 5.59pm	2	2	5	4	3	2	3	21
6pm to 6.59pm	1	2	1	3	3	5	1	16
7pm to 7.59pm	2	1	-	4	3	3	3	16
8pm to 8.59pm	2	3	5	2	1	4	1	18
9pm to 9.59pm	-	3	-	1	2	3	4	13
10pm to 10.59pm	1	1	2	2	3	2	-	11
11pm to 11.59pm	1	1	4	2	2	3	1	14
Unknown time	-	1	1	2	1	-	-	5
TOTALS	34	37	50	42	44	66	58	331

FIGURE 16: FATAL CRASHES BY TIME OF DAY AND DAY OF WEEK DAY

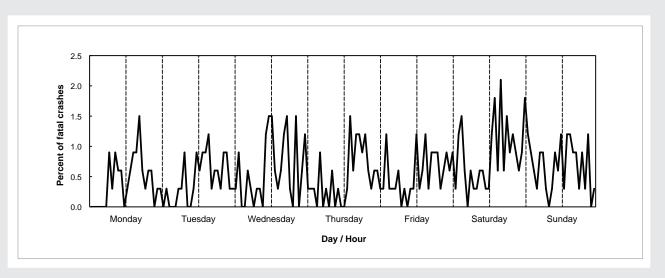


TABLE 20: LIGHT AND WEATHER CONDITIONS PREVAILING WHEN INJURY CRASHES OCCURRED YEAR ENDED 31 DECEMBER 2008

LIGHT CONDITIONS	FINE	HEAVY RAIN	LIGHT RAIN	MIST	SNOW	UNKNOWN	TOTAL
BRIGHT SUN	4408	4	31	1	1	11	4456
OVERCAST	2015	59	915	285	15	8	3297
TWILIGHT:							
Street lights on	140	3	26	7	1	-	177
Street lights off	179	1	17	7	-	-	204
No street lights	127	3	26	5	1	-	162
Not stated	-	-	-	-	-	-	-
TWILIGHT SUBTOTAL	446			19			543
DARK:							
Street lights on	1393	29	425	125	5	2	1979
Street lights off	22	3	6	3	-	-	34
No street lights	732	55	145	67	7	1	1007
Not stated	-	-	-	-	-	-	-
DARK SUBTOTAL	2147	87	576	195	12		3020
UNKNOWN LIGHT	-	-	-	-	-	-	-
TOTAL	9016	157	1591	500	30	22	11316

NOTE: Fatal crashes are not included in this table (see Table 21).

TABLE 21: LIGHT AND WEATHER CONDITIONS PREVAILING WHEN FATAL CRASHES OCCURRED YEAR ENDED 31 DECEMBER 2008

LIGHT CONDITIONS	FINE	HEAVY RAIN	LIGHT RAIN	MIST	SNOW	UNKNOWN	TOTAL
BRIGHT SUN	121	-	1	-	-	-	122
OVERCAST	30	-	24	6	-	-	60
TWILIGHT:							
Street lights on	4	-	-	-	-	-	4
Street lights off	5	-	-	-	-	-	5
No street lights	11	-	4	-	-	-	15
Not stated	-	-	-	-	-	-	-
TWILIGHT SUBTOTAL	20						24
DARK:							
Street lights on	34	1	8	5	-	-	48
Street lights off	-	-	-	-	-	-	-
No street lights	55	4	12	6	-	-	77
Not stated	-	-	-	-	-	-	-
DARK SUBTOTAL	89		20	11			125
UNKNOWN LIGHT	-	-	-	-	-	-	-
TOTAL	260	5	49	17		-	331



TABLE 22: OBJECTS COLLIDED WITH IN INJURY CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
Objects struck	Number of objects	As a % of all objects	Number during darkness	Number of objects	As a % of all objects	Number during darkness	Number of objects	Total number of objects
Driven or accompanied animals	-	-	-	2	0	2	-	2
Bridge or approach rails	21	0.3	7	70	1.1	32	-	91
Upright cliff or bank	110	1.8	65	515	8.4	203	-	625
Debris on the road	4	0.1	1	14	0.2	7	-	18
Over the bank or cliff	61	1	32	230	3.8	88	-	291
Fence letterbox hoarding	401	6.6	215	631	10.3	270	-	1032
Guard rail	56	0.9	38	270	4.4	132	-	326
House or building	117	1.9	65	12	0.2	6	-	129
Traffic island or median	109	1.8	64	21	0.3	8	-	130
Phone boxes bus shelters etc	56	0.9	28	6	0.1	3	-	62
Kerb	159	2.6	86	20	0.3	7	-	179
Slip washout or flood	1	0	1	4	0.1	1	-	5
Parked vehicle	593	9.7	248	30	0.5	9	-	623
Train	3	0	2	4	0.1	-	-	7
Pole or post	409	6.7	231	269	4.4	127	-	678
Broken down or accident vehicles	109	1.8	30	34	0.6	18	-	143
Road works signs or drums	2	0	-	4	0.1	2	-	6
Traffic sign or signals	124	2	70	115	1.9	48	-	239
Tree	285	4.7	158	313	5.1	143	-	598
Stray or wild animals	7	0.1	5	66	1.1	53	-	73
Ditch	60	1	34	534	8.8	198	-	594
Into water river or sea	24	0.4	10	52	0.9	23	-	76
Other	71	1.2	39	99	1.6	42	-	170
TOTALS	2782	45.6	1429	3315	54.4	1422		6097

**NOTE:** For area classification see Note 11. Fatal crashes are not included in this Table (see Table 23).

TABLE 23: OBJECTS COLLIDED WITH IN FATAL CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
Objects struck	Number of objects	As a % of all objects	Number during darkness	Number of objects	As a % of all objects	Number during darkness	Number of objects	Total number of objects
Driven or accompanied animals	-	-	-	-	-	-	-	-
Bridge or approach rails	1	0.3	1	10	3.4	5	-	11
Upright cliff or bank	5	1.7	3	22	7.5	15	-	27
Debris on the road	-	-	-	-	-	-	-	-
Over the bank or cliff	2	0.7	1	23	7.8	9	-	25
Fence letterbox hoarding	5	1.7	3	46	15.7	21	-	51
Guard rail	1	0.3	1	8	2.7	4	-	9
House or building	3	1	2	-	-	-	-	3
Traffic island or median	-	-	-	-	-	-	-	-
Phone boxes bus shelters etc	-	-	-	2	0.7	-	-	2
Kerb	4	1.4	4	-	-	-	-	4
Slip washout or flood	-	-	-	-	-	-	-	-
Parked vehicle	5	1.7	3	1	0.3	1	-	6
Train	1	0.3	-	-	-	-	-	1
Pole or post	11	3.8	9	18	6.1	10	-	29
Broken down or accident vehicles	1	0.3	-	1	0.3	1	-	2
Road works signs or drums	-	-	-	1	0.3	-	-	1
Traffic sign or signals	4	1.4	3	7	2.4	3	-	11
Tree	12	4.1	6	34	11.6	19	-	46
Stray or wild animals	-	-	-	2	0.7	1	-	2
Ditch	2	0.7	2	41	14	21	-	43
Into water river or sea	1	0.3	1	18	6.1	8	-	19
Other	1	0.3	-	-	-	-	-	1
TOTALS	59	20.1	39	234	79.9	118	-	293

**NOTE:** For area classification see Note 11.



## TABLE 24: INJURY CRASHES BY ROAD FEATURE ON OPEN AND URBAN ROADS

YEAR ENDING 31 DECEMBER 2008

		URBAN AREA			OPEN ROADS		UNKNOWN AREA		
ROAD FEATURE	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes	
INTERSECTIONS									
Controlled by:									
Traffic signals	951	8.4	333	38	0.3	13	-	989	
Stop sign	503	4.4	116	216	1.9	40	-	719	
Roundabout	341	3	107	25	0.2	12	-	366	
Other Give Way sign	1235	10.9	320	281	2.5	62	-	1516	
Points man or School Patrol	1	0	-	-	-	-	-	1	
Uncontrolled	749	6.6	232	226	2	72	-	975	
SUBTOTAL	3780	33.4	1108	786	6.9	199		4566	
NON-INTERSECTIONS									
Bridge	39	0.3	15	141	1.2	54	-	180	
Railway Crossing	4	0	2	10	0.1	1	-	14	
Motorway on-off ramp	4	0	3	13	0.1	5	-	17	
Raised islands	262	2.3	86	131	1.2	49	-	393	
Straight road	2061	18.2	564	1394	12.3	483	-	3455	
Easy curve	420	3.7	179	763	6.7	285	-	1183	
Moderate curve	340	3	146	873	7.7	278	-	1213	
Severe curve	81	0.7	37	214	1.9	69	-	295	
Not stated	-	-	-	-	-	-	-		
SUBTOTAL	3211	28.4	1032	3539	31.3	1224	-	6750	
TOTAL	6991	61.8	2140	4325	38.2	1423	-	11316	

NOTES: For urban/open road classification see Note 11. Fatal crashes are not included in this table (see Table 25).

# TABLE 25: FATAL CRASHES BY ROAD FEATURE ON OPEN AND URBAN ROADS

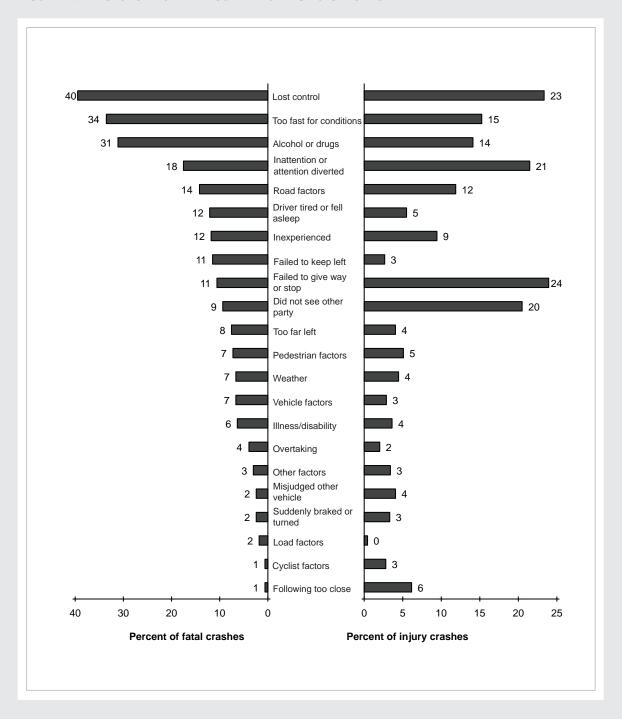
YEAR ENDING 31 DECEMBER 2008

		URBAN AREA			OPEN ROADS		UNKNOWN AREA	
ROAD FEATURE	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
INTERSECTIONS								
Controlled by:								
Traffic signals	6	1.8	3	1	0.3	1	-	7
Stop sign	7	2.1	4	8	2.4	1	-	15
Roundabout	-	-	-	-	-	-	-	-
Other Give Way sign	11	3.3	5	12	3.6	5	-	23
Points man or School Patrol	-	-	-	-	-	-	-	-
Uncontrolled	6	1.8	3	9	2.7	6	-	15
SUBTOTAL	30	9.1	15	30	9.1	13	-	60
NON-INTERSECTIONS								
Bridge	2	0.6	2	8	2.4	3	-	10
Railway Crossing	2	0.6	-	-	-	-	-	2
Motorway on-off ramp	-	-	-	-	-	-	-	-
Raised islands	3	0.9	1	3	0.9	2	-	6
Straight road	33	10	16	73	22.1	27	-	106
Easy curve	9	2.7	6	71	21.5	32	-	80
Moderate curve	8	2.4	5	54	16.3	25	-	62
Severe curve	1	0.3	-	4	1.2	2	-	5
Not stated	-	-	-	-	-	-	-	-
SUBTOTAL	58	17.5	30	213	64.4	91		271
TOTAL	88	26.6	45	243	73.4	104	_	331

NOTE: For urban/open road classification see Note 11.



FIGURE 17: FACTORS PROBABLY CONTRIBUTING TO CRASHES



YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHICLE		MOTOR CYCLE		PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	)PC							
Alcohol or Drugs	)K3							
Alcohol suspected	377	(13)	34	(-)		(-)	411	(13
Any test negative	354	(23)	22	(6)		(-)	376	(2)
All tests positive or refused	918	(62)	43	(11)	_	(-)	961	(7:
Result of test unknown	191	(13)	16	(1)		(-)	207	(1
Visibly intoxicated non-driver	7	(1)	-	(-)	14	(-)	21	(1
(pedestrian/cyclist/passenger)		(1)		( )	14	( )	21	(
Not suspected and test negative	-	(73)	-	(25)	-	(-)	-	(9
Drugs suspected	39	(16)	4	(1)	-	(-)	43	(1
Drugs proven	12	(-)	-	(1)	-	(-)	12	(
Other	2	(-)	-	(-)	-	(-)	2	(
Totals	1900	(201)	119	(45)	14		2033	(24
Too fast for Conditions								
Cornering	1091	(65)	97	(13)	5	(-)	1193	(7
On straight	299	(19)	20	(2)	5	(-)	324	(2
To give way at intersection	52	(2)	3	(-)	4	(-)	59	(
Approaching railway crossing	-	(1)	-	(-)	-	(-)	-	(
Passing stationary school bus	3	(-)	-	(-)	-	(-)	3	(
At temporary speed limit	43	(-)	1	(-)	-	(-)	44	
At crash or emergency	1	(-)	-	(-)	-	(-)	1	(
Other	119	(7)	10	(2)	6	(-)	135	(
Totals	1608	(94)	131	(17)	20		1759	(11
Failed to keep left								
Swung wide on bend	96	(18)	17	(1)	1	(-)	114	(1
Swung wide at an intersection	24	(-)	3	(-)	1	(-)	28	(
Cutting corner								
- on bend	48	(2)	6	(-)	1	(-)	55	(
- at an intersection	28	(-)	1	(-)	4	(-)	33	
On straight	59	(14)	1	(-)	1	(-)	61	(1
Vehicle crossed raised median	2	(-)	-	(-)	-	(-)	2	
Driving or riding abreast (cyclists more than 2 abreast)	-	(-)	2	(-)	1	(-)	3	ı
Wandering or wobbling	3	(1)	-	(-)	5	(-)	8	(
Too far left/right	429	(25)	32	(1)	11	(-)	472	(2
Other	22	(3)	5	(1)	2	(-)	29	(
Totals	711	(63)	67	(3)	27	(-)	805	(66

## (Continued)



YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHICL	E	MOTOR CYCLE	Ē	PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	RS							
Lost control								
When turning	1154	(65)	136	(13)	1	(1)	1291	(79)
Under heavy braking	136	(2)	41	(1)	2	(-)	179	(3)
Under heavy acceleration	86	(2)	7	(-)	-	(-)	93	(2)
While returning to seal from unsealed shoulder	157	(16)	2	(1)	-	(-)	159	(17)
Due to road conditions	279	(7)	96	(3)	1	(-)	376	(10)
Due to vehicle fault	61	(1)	10	(-)	-	(-)	71	(1)
Avoiding another vehicle, pedestrian, party or obstacle on roadway	93	(3)	26	(1)	4	(-)	123	(4)
On unsealed road	78	(1)	8	(1)	1	(-)	87	(2)
End of seal	4	(-)	-	(-)	-	(-)	4	(-)
Other	329	(14)	45	(4)	3	(-)	377	(18)
Totals	2377	(111)	371	(24)	12	(1)	2760	(136)
Failed to signal in time								
When moving to left, pulling over to left	2	(-)	-	(-)	-	(-)	2	(-)
When turning left	3	(-)	-	(-)	1	(-)	4	(-)
When pulling out or moving to the right	6	(-)	-	(-)	2	(-)	8	(-)
When turning right	16	(-)	1	(-)	1	(-)	18	(-)
Incorrect signal	28	(-)	4	(-)	-	(-)	32	(-)
Other	5	(-)	-	(-)	-	(-)	5	(-)
Totals	60							
Overtaking								
A line of traffic or queue	15	(-)	14	(2)	4	(-)	33	(2)
Deliberately in the face of oncoming traffic	2	(1)	1	(-)	-	(-)	3	(1)
Failed to notice oncoming traffic	23	(3)	-	(-)	-	(-)	23	(3)
Misjudged speed or distance of oncoming traffic	1	(-)	-	(-)	-	(-)	1	(-)
At no passing line	9	(3)	3	(-)	-	(-)	12	(3)
With insufficient visibility	13	(-)	3	(2)	-	(-)	16	(2)
At an intersection without due care	17	(-)	6	(-)	-	(-)	23	(-)
On left without due care	14	(-)	14	(1)	16	(-)	44	(1)
Cut in after overtaking	41	(1)	1	(-)	-	(-)	42	(1)
Vehicle signalling right turn	27	(-)	23	(-)	3	(-)	53	(-)
Carelessly at a pedestrian crossing	1	(-)	-	(-)	-	(-)	1	(-)
Other	19	(3)	3	(-)	-	(-)	22	(3)
Totals	182	(11)	68	(5)	23	(-)	273	(16)

#### (Continued)

YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHICL	.E	MOTOR CYCLE		PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	)RS							
Wrong lane or turned from wro								
Turned right from incorrect lane	7	(-)	1	(-)	1	(-)	9	(-)
Turned left from incorrect lane	5	(-)	-	(-)	1	(-)	6	(-)
Travelled straight ahead from turning lane or flush median	4	(-)	1	(-)	2	(-)	7	(-)
Turned right from left side of road	19	(-)	1	(-)	8	(-)	28	(-)
Turned left from near centre line	11	(-)	-	(-)	-	(-)	11	(-)
Turned into incorrect lane	8	(-)	1	(-)	-	(-)	9	(-)
Weaving or cut in on multi-lane roads	5	(-)	-	(-)	-	(-)	5	(-)
Moved left to avoid slow vehicle	-	(-)	-	(-)	-	(-)	-	(-)
Other	1	(-)	3	(-)	2	(-)	6	(-)
Totals	60	(-)	7	(-)	14	(-)	81	(-)
In Line of Traffic								
Following too closely	732	(1)	49	(-)	5	(-)	786	(1)
Travelling unreasonably slowly	1	(-)	-	(-)	-	(-)	1	(-)
Motorist crowded cyclist	13	(1)	-	(-)	1	(-)	14	(1)
Incorrect merging manoeuvre	5	(-)	-	(-)	-	(-)	5	(-)
Other	1	(-)	1	(-)	-	(-)	2	(-)
Totals	752	(2)	50	(-)	6	(-)	808	(2)
Sudden Action								
Braked	117	(-)	13	(1)	2	(-)	132	(1)
Turned left	6	(-)	-	(-)	1	(-)	7	(-)
Turned right	5	(-)	-	(-)	1	(-)	6	(-)
Swerved to avoid								
- pedestrian	11	(-)	2	(-)	-	(-)	13	(-)
- animal	66	(1)	7	(-)	-	(-)	73	(1)
- crash or broken down vehicle	1	(-)	-	(-)	-	(-)	1	(-)
- vehicle	112	(3)	30	(-)	6	(-)	148	(3)
- object or for unknown reason	14	(2)	2	(-)	3	(-)	19	(2)
Other	7	(1)	1	(-)	1	(-)	9	(1)
Totals	339	(7)	55	(1)	14	(-)	408	(8)
Forbidden movements								
Wrong way in one way street, motorway or roundabout	9	(-)	1	(-)	2	(-)	12	(-)
When turning or U turning contrary to a sign	5	(-)	-	(-)	-	(-)	5	(-)
Contrary to "in" or "out" only driveway signs	1	(-)	-	(-)	-	(-)	1	(-)
Driving or riding on footpath	2	(-)	5	(-)	71	(-)	78	(-
On incorrect side of island or median	30	(1)	1	(-)	4	(-)	35	(1)
Contrary to ""No Entry"" sign	1	(-)	-	(-)	-	(-)	1	(-
In car park	-	(-)	-	(-)	-	(-)	-	(-
Motor vehicle in cycle lane	3	(-)	12	(-)	-	(-)	15	(-)
Bus / Transit lane	1	(-)	5	(-)	-	(-)	6	(-
Cyclist riding on ped-Xing / ped signals	-	(-)	-	(-)	16	(-)	16	(-)
Other	8	(-)	3	(-)	-	(-)	11	(-
Totals	60	(1)	27	(-)	93	(-)	180	(1)
TOTAL DRIVER/RIDER CONTROL FACTORS	8049	(490)	900	(95)	227	(1)	9176	(586)

(Continued)



YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHICLE		MOTOR CYCLE	:	PEDAL CYCLE		TOTALS	
VEHICLE CONFLICT FACTORS								
Failed to give way								
At a Stop sign	307	(6)	4	(1)	1	(-)	312	(7)
At a Give Way sign	791	(9)	8	(-)	7	(-)	806	(9)
When turning, to non-turning	801	(9)	8	(1)	7	(-)	816	(10)
traffic	2	( )		( )		( )	2	
When deemed turning by markings, not geometry	2	(-)	-	(-)	-	(-)	2	(-)
When turning left, to opposing	4	(-)	-	(-)	-	(-)	4	(-)
right turning traffic	70	(2)				( )	70	(2)
To pedestrian on a crossing	70	(2)	-	(-)	-	(-)	70	(2)
When turning at signals to pedestrians	44	(1)	9	(-)	-	(-)	44	(1)
When entering roadway from	188	(1)	9	(-)	10	(-)	207	(1)
driveway			_		-			
To traffic approaching or crossing from right	56	(1)	3	(-)	9	(-)	68	(1)
At one lane bridge/road	10	(-)	1	(-)	-	(-)	11	(-)
To pedestrian on footpath or verge	4	(-)	-	(-)	-	(-)	4	(-)
Entering roadway not from driveway or intersection	4	(-)	-	(-)	25	(-)	29	(-)
To emergency vehicle	6	(-)	-	(-)	-	(-)	6	(-)
Driver waved through	54	(-)	-	(-)	1	(-)	55	(-)
Other	12	(-)	-	(-)	7	(-)	19	(-
Totals	2353	(29)	33	(2)	67		2453	(31)
Did not stop								
At stop sign	112	(3)	4	(-)	2	(-)	118	(3)
At steady red light	247	(1)	6	(-)	10	(-)	263	(1)
At steady red arrow	28	(-)	-	(-)	1	(-)	29	(-)
At steady amber light	29	(-)	3	(-)	2	(-)	34	(-
At steady amber arrow	3	(-)	-	(-)	-	(-)	3	(-
At flashing red lights (railway crossing, fire station etc)	-	(-)	-	(-)	1	(-)	3	(-)
For police or flag person	1	(-)	-	(-)	-	(-)	1	(-
For school patrol/kea crossing	-	(-)	-	(-)	-	(-)	-	(-
Other Totals	420	(4)	13	(-)	- 16	(-)	449	(-)
Inattentive: failed to notice	420	(4)	15	(-)	16	(-)	449	(4)
Car slowing, stopping or stopped	824	(5)	43	(-)	12	(-)	879	(5)
in front Bend in road	31	(2)	6	(-)	_	(-)	37	(2)
Indication of vehicle in front	72	(-)	20	(-)	5	(-)	97	(-)
Traffic lights	129	(1)	2	(-)	1	(-)	132	(1)
Intersection or its Stop/Give Way	85	(2)	4	(-)	-	(-)	89	(2)
control Other regulatory sign/markings	1	(-)	_	(-)	-	(-)	1	(-:
Warning sign	15	(-)	2	(-)	-	(-)	17	(-)
Direction, information signs/ markings	3	(-)	-	(-)	-	(-)	3	(-)
Roadworks signs	10	(-)	-	(-)	-	(-)	10	(-
Lane use arrows/markings	1	(-)	-	(-)	-	(-)	1	(-)
Obstructions on roadway	33	(-)	3	(-)	2	(-)	38	(-)
Other	146	(15)	21	(-)	13	(-)	180	(15)
Totals	1350	(25)	101	(-)	33	(-)	1484	(25)

(Continued)

YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHIC	CLE	MOTOR CYCLI	E	PEDAL CYCLE		TOTALS	
VEHICLE CONFLICT FACTORS								
Attention diverted by:								
Passengers	146	(8)	3	(-)	-	(-)	149	(8
Scenery or persons outside vehicle	145	(1)	15	(-)	4	(-)	164	(1
Other traffic	233	(3)	7	(-)	3	(-)	243	(3
Animal or insect in vehicle	24	(-)	-	(-)	-	(-)	24	(-
Trying to find intersection/house no.	42	(-)	1	(-)	-	(-)	43	(-
Advertising or signs	4	(-)	-	(-)	-	(-)	4	(-
Emotionally upset	92	(7)	4	(1)	-	(-)	96	(8)
Cigarette, radio, glove box etc.	223	(6)	6	(-)	-	(-)	229	(6
Cell phone or two way communications device	116	(1)	-	(-)	1	(-)	117	(1
Driver dazzled	205	(5)	8	(-)	3	(-)	216	(5
Other	154	(9)	11	(-)	7	(-)	172	(9
Totals	1384	(40)	55	(1)	18	(-)	1457	(41
Did not see or look for another	party							
Behind when								
- reversing	122	(1)	-	(-)	1	(-)	123	(1
- changing lanes, position, or								
direction (includes U-turns)	407	(1)	10	(-)	33	(1)	450	(2
<ul> <li>pulling out from parked position</li> </ul>	40	(-)	1	(-)	-	(-)	41	(-
- opening door or leaving vehicle	68	(1)	-	(-)	-	(-)	68	(1
When required to give way to								
- traffic from another direction	1223	(17)	18	(1)	19	(-)	1260	(18
- pedestrians	57	(1)	-	(-)	-	(-)	57	(1
When visibility was								
- obstructed by other vehicles	228	(3)	7	(-)	2	(-)	237	(3
- limited by roadside features	63	(2)	2	(-)	2	(-)	67	(2
When first in queue on receiving green light	5	(-)	-	(-)	-	(-)	5	(-
Other	136	(4)	11	(-)	18	(-)	165	(4
Totals	2349	(30)	49	(1)	75	(1)	2473	(32
Misjudged speed, distance, size	e, etc of							
Other vehicle coming from								
- behind or alongside	40	(3)	1	(-)	5	(-)	46	(3
- another direction with right of way	127	(2)	2	(-)	5	(-)	134	(2
Pedestrian movement or intention	10	(1)	-	(-)	-	(-)	10	(1
Towed vehicle, or while towing	-	(-)	-	(-)	-	(-)	-	(-
Fixed object or obstacle	20	(-)	1	(-)	-	(-)	21	(-
Own vehicle	78	(2)	12	(-)	1	(-)	91	(2
Misjudged intentions of another party	144	(-)	20	(-)	11	(-)	175	(-
Other	11	(-)	1	(-)	1	(-)	13	(-
Totals	430	(8)	37	(-)	23	(-)	490	8)
TOTAL VEHICLE CONFLICT FACTORS	8286	(136)	288	(4)	232	(1)	8806	(141

(Continued)



YEAR ENDING 31 DECEMBER 2008

MOTOR VEHICLE		MOTOR CYCLE		PEDAL CYCLE		TOTALS	
6	(1)	-	(-)	-	(-)	6	(1)
475	(17)	80	(2)	1	(-)	556	(19)
57	(4)	25	(2)	1	(-)	83	(6)
109	(1)	5	(1)	2	(-)	116	(2)
3	(-)	2	(-)	-	(-)	5	(-)
2	(-)	-	(-)	-	(-)	2	(-)
176	(4)	4	(-)	1	(-)	181	(4)
-	(-)	-	(-)	4	(-)	4	(-)
144	(7)	34	(2)	-	(-)	178	(9)
972	(34)	150	(7)	9	(-)	1131	(41)
eep)							
22	(2)	2	(-)	-	(-)	24	(2)
151	(2)	-	(-)	-	(-)	151	(2)
-	(-)	-	(-)	-	(-)	-	(-)
28	(1)	-	(-)	-	(-)	28	(1)
-	(-)	-	(-)	-	(-)	-	(-)
429	(34)	2	(1)	1	(-)	432	(35)
630	(39)	4	(1)	1	(-)	635	(40)
630	(39)	4	(1)	1	(-)	635	(40)
;							
4	(-)	-	(-)	-	(-)	4	(-)
1	(-)	-	(-)	-	(-)	1	(-)
62	(1)	1	(-)	-	(-)	63	(1)
-	(-)	-	(-)	-	(-)	-	(-)
1	(-)	-	(-)	-	(-)	1	(-)
4	(-)	1	(-)	3	(-)	8	(-)
34	(-)	-	(-)	-	(-)	34	(-)
10	(-)	-	(-)	-	(-)	10	(-)
1	(-)	-	(-)	-	(-)	1	(-)
33	(1)	2	(1)	-	(-)	35	(2)
		4		3			(3)
32	(6)	2	(-)	1	(-)	35	(6)
-		-		-		-	(-)
39	(-)	6	(-)	-	(-)	45	(-)
21	(-)	1	(-)	_	(-)	77	(-)
							(2)
44	(∠)	2	(-)	'	(-)	7/	(2)
	6   475   57   109   3   2   176   -	6 (1) 475 (17) 57 (4) 109 (1) 3 (-) 2 (-) 176 (4) - (-) 144 (7) 972 (34) eep)  22 (2) 151 (2) - (-) 28 (1) - (-) 429 (34) 630 (39) 64 (-) 62 (1) 62 (1) 63 (-) 64 (-) 64 (-) 65 (-) 65 (-) 67 (-) 68 (-) 69 (-) 60 (-)	6	6	6 (1) - (·)		6

#### (Continued)

 $\textbf{NOTE:} \ The \ figures \ in \ brackets \ are \ the \ number \ of \ factors \ in \ fatal \ crashes \ and \ are \ not \ included \ in \ the \ adjacent \ totals.$ See Note 10.

YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHIC	CLE	MOTOR CYCL	E	PEDAL CYCLE		TOTALS	
Parked or stopped								
Inadequately lit at night (not lit by street lights or park lights off)	5	(-)	-	(-)	-	(-)	5	(-)
At a point of limited visibility	2	(-)	-	(-)	-	(-)	2	(-)
Not as close as practicable to the side of the road	3	(-)	-	(-)	-	(-)	3	(-)
On incorrect side of the road	-	(-)	-	(-)	-	(-)	-	(-)
Double parked	2	(-)	-	(-)	-	(-)	2	(-)
In a 'No Stopping' area	2	(-)	-	(-)	-	(-)	2	(-)
Not clear of rail crossing	-	(-)	-	(-)	-	(-)	-	(-)
In cycle or Transit lane	-	(-)	-	(-)	-	(-)	-	(-)
Other	6	(-)	-	(-)	1	(-)	7	(-)
Totals	20	(-)	-	(-)	1	(-)	21	(-)
TOTAL GENERAL DRIVER FACTORS	1908	(83)	169	(9)	16	(-)	2093	(92)

(Continued)



YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHIC	LE	MOTOR CYCLI	E	PEDAL CYCLE		TOTALS	
GENERAL PERSON FACTORS								
Illness and disability								
Illness with no warning	176	(7)	7	()		(1)	183	(0)
	8	(7)	-	(-)	1	(1)	9	(8)
Physically disabled  Defective vision		(-)		(-)	I	(-)	18	(-)
	18	(2)	-	(-)	-	(-)	-	(2)
Medical illness (not sudden) flu, diabetes	62	(2)	-	(-)	-	(-)	62	(2)
Mental illness (depression, psychosis)	16	(-)	3	(-)	2	(-)	21	(-)
Suicidal (but not successful)	17	(-)	-	(-)	-	(-)	17	(-)
Impaired ability due to old age	78	(7)	-	(-)	2	(-)	80	(7)
Other	34	(4)	-	(-)	2	(-)	36	(4)
Totals	409	(22)	10			(1)	426	(23)
Intentional or criminal								
Deliberate homicide (only if successful)	-	(1)	-	(-)	-	(-)	-	(1)
Intentional collision	48	(-)	1	(-)	1	(-)	50	(-)
Committed suicide (only if succeeded)	1	(-)	-	(-)	-	(-)	1	(-)
Evading enforcement	71	(4)	19	(-)	-	(-)	90	(4)
Object deliberately thrown at or dropped on vehicle/shot at	1	(-)	-	(-)	-	(-)	1	(-)
Object thrown from vehicle	2	(-)	-	(-)	-	(-)	2	(-)
Stolen vehicle	34	(4)	6	(-)	-	(-)	40	(4)
Other	9	(2)	-	(-)	-	(-)	9	(2)
Totals	166	(11)	26				193	(11)
Driver/Pass boarding/leaving/	in vehicle							
Boarding moving vehicle	2	(-)	-	(-)	-	(-)	2	(-)
Intentionally leaving moving vehicle	3	(2)	-	(-)	-	(-)	3	(2)
Riding in insecure position	15	(3)	5	(1)	2	(-)	22	(4)
Interfered with driver	24	(-)	-	(-)	-	(-)	24	(-)
Opened door inadvertently	8	(-)	-	(-)	-	(-)	8	(-)
Overloaded vehicle (with passengers)	2	(-)	-	(-)	-	(-)	2	(-)
Child playing in parked vehicle	1	(-)	-	(-)	-	(-)	1	(-)
Other	3	(-)	-	(-)	-	(-)	3	(-)
Totals	58	(5)		(1)			65	(6)
Miscellaneous person								
Casualty drowned	-	(2)	-	(-)	-	(-)	-	(2)
Casualty thrown from vehicle	7	(20)	2	(2)	-	(-)	9	(22)
Equestrian not keeping to verge	-	(-)	-	(-)	-	(-)	-	(-)
Cyclist or motorcyclist wearing dark clothing	-	(-)	3	(-)	12	(-)	15	(-)
Other	-	(-)	-	(-)	-	(-)	-	(-)
Totals	7	(22)	5	(2)	12	(-)	24	(24)
TOTAL GENERAL PERSON FACTORS	640	(60)	46	(3)	22	(1)	708	(64)

#### (Continued)

YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHI	CLE	MOTOR CYCLI	E	PEDAL CYCLE		TOTALS	
VEHICLE FACTORS								
Lights and Reflectors								
Dazzling headlights	7	(-)	-	(-)	-	(-)	7	(-
Inadequate or no headlights	17	(3)	5	(2)	19	(-)	41	(5
Headlights failed suddenly	2	(-)	-	(-)	-	(-)	2	(-
Brake lights or indicators defective or not fitted	3	(-)	-	(-)	-	(-)	3	(-
Inadequate or no tail-lights	3	(-)	1	(2)	1	(-)	5	(2
Inadequate or no reflectors	1	(-)	2	(-)	2	(-)	5	(-
Lights or reflectors covered by dirt	1	(-)	-	(-)	-	(-)	1	(-
Other	6	(1)	-	(-)	-	(-)	6	(1
Totals	40	(4)	8	(4)	22	(-)	70	(8
Brakes	-10	(/	<u> </u>	(/		( )	70	(0
Parking brake	2	()		()		()	3	
- failed	3	(-)	-	(-)	-	(-)	3	(-
- defective	2	(-)	1	(-)	-	(-)	3	(-
Service brake								
- failed	9	(-)	2	(-)	-	(-)	11	(-
- defective	7	(-)	5	(-)	-	(-)	12	(-
Jack-knifed	6	(-)	-	(-)	-	(-)	6	(-
Other	7	(1)	4	(1)	2	(-)	13	(2
Totals	34	(1)	12	(1)			48	(2
Steering								
Defective	1	(-)	-	(-)	-	(-)	1	(-)
Failed suddenly	1	(-)	-	(-)	-	(-)	1	(-
Other	3	(-)	-	(-)	-	(-)	3	(-
Totals	5	(-)	-	(-)	-	(-)	5	(-
Tyres								
Puncture or blow out	56	(2)	3	(-)	-	(-)	59	(2
Tread worn	70	(6)	3	(1)	-	(-)	73	(7
Incorrect type	8	(2)	1	(-)	-	(-)	9	(2
Mixed treads/space savers	5	(2)	-	(-)	-	(-)	5	(2
Other	13	(2)	3	(-)	-	(-)	16	(2
Totals	152	(14)	10	(1)	_	(-)	162	(15)
Windscreen or mirror		(,		(.,		( )		(
Windscreen shattered	2	(-)	_	(-)	_	(-)	2	(-
Windscreen or rear window dirty	2	(-)	-	(-)	_	(-)	2	
Rear vision mirror not adjusted correctly	-	(-)	-	(-)	-	(-)	2	(-
No rear vision mirror	1	(-)	-	(-)	-	(-)	1	(-
Windscreen, spectacles or rear window misted/frosted	35	(-)	-	(-)	-	(-)	35	(-
Inadequate or no sun visors	-	(-)	-	(-)	-	(-)	-	(-
Inadequate or no windscreen wipers	1	(-)	-	(-)	-	(-)	1	(-
Cycle/motorcycle visor, goggles or screen defective, misted etc	-	(-)	2	(-)	-	(-)	2	(-
Other	1	(-)	-	(-)	-	(-)	1	(-
Totals	42	(-)	2	(-)	-	(-)	44	(-)

(Continued)



YEAR ENDING 31 DECEMBER 2008

FACTORS	MOTOR VEHIC	CLE	MOTOR CYCL	E	PEDAL CYCLE		TOTALS	
VEHICLE FACTORS CONTINUED								
Mechanical								
Engine failure	1	(-)	_	(-)	-	(-)	1	(-)
Transmission failure	1	(-)	3	(-)	_	(-)	4	(-)
Accelerator or throttle jammed	2	(-)	_	(-)	_	(-)	2	(-)
Other	9	(-)	4	(-)	_	(-)	13	(-)
Totals	13	(-)	7	(-)		(-)	20	(-)
Body or chassis		· · · · · · · · · · · · · · · · · · ·				•		· · · · · · · · · · · · · · · · · · ·
Body, chassis or frame failure	1	(1)	1	(-)	-	(-)	2	(1)
Suspension failure	3	(-)	-	(-)	_	(-)	3	(-)
Failure of door catch/door not shut	2	(-)	-	(-)	1	(-)	3	(-)
Inadequate mudguards	1	(-)	-	(-)	-	(-)	1	(-)
Inadequate tow coupling	2	(-)	-	(-)	-	(-)	2	(-)
Inadequate or no safety chain	-	(-)	-	(-)	-	(-)	-	(-)
Bonnet catch failed	-	(-)	-	(-)	-	(-)	-	(-)
Wheel off	2	(-)	-	(-)	-	(-)	2	(-)
Broken axle	1	(-)	-	(-)	-	(-)	1	(-)
Inconspicuous colour	9	(-)	-	(-)	-	(-)	9	(-)
Blind spot	63	(-)	_	(-)	_	(-)	63	(-)
Seatbelt/restraint failed	-	(-)	_	(-)	_	(-)	-	(-)
Airbag failed to inflate (fully)	-	(-)	_	(-)	_	(-)	-	(-)
Other	7	(2)	1	(1)	_	(-)	8	(3)
Totals	91	(3)	2	(1)	1	(-)	94	(4)
Load								
Interferes with driver	1	(1)	-	(-)	-	(-)	1	(1)
Not well secured or load moved	16	(2)	1	(-)	-	(-)	17	(2)
Overhanging	-	(-)	-	(-)	-	(-)	-	(-)
Load obscured vision	-	(-)	-	(-)	-	(-)	-	(-)
Excess dimensions not adequately indicated	-	(-)	-	(-)	-	(-)	-	(-)
Overdimension vehicle or load	3	(-)	-	(-)	-	(-)	3	(-)
Load too heavy	9	(1)	-	(-)	-	(-)	9	(1)
Towed vehicle or trailer too heavy or incompatible	4	(1)	-	(-)	-	(-)	4	(1)
Other	14	(1)	1	(-)	-	(-)	15	(1)
Totals	47	(6)					49	(6)
Miscellaneous vehicle								
Emergency vehicle attending emergency	6	(1)	1	(-)	-	(-)	7	(1)
Vehicle caught fire	29	(9)	3	(1)	-	(-)	32	(10)
Being towed	-	(-)	-	(-)	1	(-)	1	(-)
Airbag contributed to crash or injury	6	(-)	-	(-)	-	(-)	6	(-)
Seatbelt/restraint absent or unusable	-	(-)	-	(-)	-	(-)	-	(-)
Dangerous goods	-	(-)	-	(-)	-	(-)	-	(-)
Other	1	(-)	-	(-)	-	(-)	1	(-)
Totals	42	(10)	4	(1)	1	(-)	47	(11)
TOTAL VEHICLE FACTORS	466	(38)	47	(8)	26	(-)	539	(46)

(Continued)

YEAR ENDING 31 DECEMBER 2008

FACTORS	NUMBER	
PEDESTRIAN FACTORS		
Walking along road		
Not keeping to footpath	7	(1
Not keeping to side of road	5	(-
Not facing oncoming traffic	7	(-
Not on outside of blind curve	-	(-
Wheeled ped inconsiderate or dangerous on footpath	1	(-
Other	2	(-
Totals	22	(1
Crossing road		
Walking heedless of traffic	175	(6
Stepping out from behind parked vehicle	81	(3
Running heedless of traffic	223	(6
Failed to use pedestrian crossing when one within 20 metres	13	(1
Waiting on roadway for moving traffic	14	(1
Confused by traffic or stepped back	6	(-
Stepping suddenly onto pedestrian crossing	9	(1
Not complying with traffic signals or school patrol	26	(-
Misjudged speed and/or distance of vehicle	15	(-
Other	30	(-
Totals	592	(18
Miscellaneous		
Pushing, working or unloading vehicle	9	(1
Playing on, or unnecessarily on road	33	(6
Working on road	5	(-
Wearing dark clothing	25	(6
Vision obscured by umbrella or clothing	5	(-
Child escaped from supervision	12	(-
Unsupervised child	50	(2
Sitting/lying on road	1	(2
Pedestrian from school bus	1	(1
Pedestrian behind reversing/manoeuvring vehicle	21	(1
Overseas pedestrian	8	(2
Pedestrian attention diverted (music player ,cigarette, cell phone etc)	22	(2
Other	9	(-
Totals	201	(23
TOTAL PEDESTRIAN FACTORS	815	(42

#### (Continued)

 $\textbf{NOTE:} \ The \ figures \ in \ brackets \ are \ the \ number \ of \ factors \ in \ fatal \ crashes \ and \ are \ not \ included \ in \ the \ adjacent \ totals.$ See Note 10.



YEAR ENDING 31 DECEMBER 2008

FACTORS	NUMBER	
ROAD FACTORS		
Slippery because of		
Rain	491	(13)
Frost or ice	82	(-)
Snow or hail	15	(-)
Loose material on seal	128	(2)
Mud	8	(-)
Oil/diesel/fuel	35	(1)
Painted markings	7	(-
Recently graded	4	(-
Surface bleeding/defective	15	(3
Other	89	(-
Totals	874	(19
Surface	874	(19
	17	(2
Potholed Uneven	17	(2
	29	(1
Deep loose metal	41	(1
High crown	1	(-
Curve not well banked	1	(-
Edge badly defined or gave way	7	(-
Under construction or maintenance	146	(4
Unusually narrow	21	(3
Broken glass	1	(-
Other	30	(2
Totals	294	(13)
Obstructed		
Fallen tree or branch	5	(-
Slip or subsidence	4	(-
Flood waters, large puddles, ford	7	(-
Road works		
- not adequately lighted	-	(-
- not adequately signposted	7	(1
Roadside object fell on vehicle	1	(-
Object flicked up by vehicle	-	(-
Other	8	(-
Totals	32	(1
Visibility limited by		
Curve	51	(4
Crest	46	(4
Building	1	(-
Trees	16	(1
Hedge or fence	20	(1
Scrub or long grass	10	(1
Bank	4	(1
Temporary obstruction or dust/smoke	5	(-
D	65	(-
Parked venicle		
Parked vehicle Other	40	(4

#### (Continued)

YEAR ENDING 31 DECEMBER 2008

FACTORS	NUMBER	
ROAD FACTORS CONTINUED		
Signs and signals		
Damaged, removed or malfunctioned	10	(-
Badly located	6	(-
Ineffective or inadequate	19	(-
Necessary	17	(3
Signals turned off	4	(1
Other	4	(-
Totals	60	(4
Markings		
Faded	11	(-
Difficult to see in weather conditions	2	(-
Necessary	3	(-
Not visible due to geometry or vehicles	-	(-
Old markings not adequately removed	-	(-
Other	1	(1
Totals	17	(1
Street lighting		
Failed	2	(-
Inadequate	23	(1
Glare on wet road	1	(-
Pedestrian crossing not adequately lighted	-	(-
Other	3	(-
Totals	29	(1
Raised islands and roundabouts		
Difficult to see	-	(-
Ineffective, badly located/designed	-	(-
Cyclist squeeze point	-	(-
Other	-	(-
Totals	-	(-
TOTAL ROAD FACTORS	1564	(55

#### (Continued)



YEAR ENDING 31 DECEMBER 2008

FACTORS	NUMBER	
MISCELLANEOUS FACTORS		
Weather		
Heavy rain	234	(8)
Dazzling sun	182	(8)
Strong wind	32	(3)
Fog or mist	54	(2
Snow sleet or hail	14	(-
Other	2	(1
Ottner	518	(22)
Animals	318	(22)
	0	
Household pet rushed out or playing	8	(-)
Farm animal straying	58	(1
Farm animal attended but		
- inadequate warning or unexpected	2	(-
- out of control	-	(1
Wild	6	(-
Other	3	(-
Totals	77	(2
Entering or leaving land use		
Roadside stall	2	(-
Service station	72	(-
Specialised liquor outlet	11	(-
Takeaway foods	19	(-
Shopping complex	69	(-
Car parking building/area	36	(-
Other commercial	187	(-
Industrial site	13	(-
Private house/farm	460	(9
Other non-commercial	79	(5
Mobile shop or vendor	-	(-
Other	26	(-
Totals	974	(14
Unknown Factor	6	(-
TOTAL MISCELLANEOUS FACTORS	1575	(38
TOTAL ROAD FACTORS	25276	(1064

## (Continued)

TABLE 26A: CRASHES AND CASUALTIES WHERE DRIVER ALCOHOL/DRUGS WAS A CONTRIBUTING FACTOR

		Crashes with A	lcohol/Drugs		Casualties from Crashes with Alcohol/Drugs					
	Fata	ıl	Injur	ry	Deat	hs	Injuries			
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
1985	238	36.1	2493	19.3	274	36.7	4418	23.4		
1986	266	40.5	2575	20.1	328	42.8	4520	23.9		
1987	271	39.4	2595	20.5	329	41.3	4498	24.0		
1988	266	42.6	2500	20.9	318	43.7	4246	24.5		
1989	264	40.6	2364	20.8	321	42.1	3969	24.0		
1990	268	42.1	2716	22.3	318	43.6	4531	25.6		
1991	225	40.6	2424	20.9	269	41.4	3935	23.5		
1992	221	40.8	2282	20.6	273	42.3	3672	22.8		
1993	185	35.8	1906	18.2	227	37.8	3042	20.1		
1994	190	38.3	2044	18.0	225	38.8	3300	19.9		
1995	162	32.3	2118	18.1	200	34.4	3421	20.3		
1996	129	28.2	1652	16.3	148	28.8	2664	18.0		
1997	127	27.1	1389	15.5	147	27.3	2317	17.4		
1998	118	27.1	1347	16.2	142	28.3	2233	18.0		
1999	100	23.0	1146	14.3	122	24.0	1904	15.9		
2000	101	26.4	1063	14.3	115	24.9	1727	15.8		
2001	104	26.3	1111	13.1	118	25.9	1870	15.1		
2002	95	26.1	1296	13.2	109	27.0	1995	14.3		
2003	124	30.6	1229	12.0	141	30.6	1953	13.6		
2004	116	30.9	1235	12.4	135	31.0	1899	13.7		
2005	101	29.6	1335	12.8	116	28.6	1992	13.8		
2006	99	28.3	1563	14.1	109	27.7	2370	15.4		
2007	117	31.1	1584	13.6	128	30.3	2336	14.6		
2008	103	31.1	1597	14.1	119	32.5	2308	15.2		



TABLE 26B: CRASHES AND CASUALTIES WHERE TRAVELLING TOO FAST FOR CONDITIONS WAS A **CONTRIBUTING FACTOR** 

		Crashes wi	th Speed		Casualties from Crashes with Speed					
	Fata	ıl	Injur	y	Deatl	hs	Injuries			
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
1985	193	29.2	1848	14.3	218	29.2	3210	17.0		
1986	192	29.3	2024	15.8	224	29.2	3544	18.8		
1987	251	36.5	2253	17.8	292	36.7	3904	20.8		
1988	231	37.0	2204	18.5	267	36.7	3650	21.0		
1989	257	39.5	2146	18.9	311	40.8	3624	21.9		
1990	224	35.2	2041	16.8	265	36.4	3422	19.3		
1991	190	34.3	2108	18.2	225	34.6	3383	20.2		
1992	195	36.0	1918	17.3	241	37.3	3164	19.6		
1993	192	37.1	1712	16.3	228	38.0	2801	18.5		
1994	191	38.5	1816	16.0	228	39.3	2982	18.0		
1995	182	36.3	1827	15.6	221	38.0	2988	17.7		
1996	153	33.5	1684	16.7	177	34.4	2806	19.0		
1997	137	29.3	1461	16.3	162	30.1	2508	18.8		
1998	140	32.1	1415	17.0	162	32.3	2427	19.6		
1999	124	28.6	1180	14.7	153	30.1	2095	17.5		
2000	87	22.7	1122	15.1	102	22.1	1923	17.5		
2001	123	31.1	1298	15.3	141	31.0	2197	17.8		
2002	108	29.7	1431	14.6	126	31.2	2339	16.8		
2003	140	34.6	1644	16.1	167	36.2	2601	18.1		
2004	138	36.7	1632	16.3	172	39.4	2624	18.9		
2005	112	32.8	1700	16.2	130	32.1	2670	18.5		
2006	107	30.7	1734	15.8	126	32.2	2746	18.1		
2007	117	31.1	1905	16.3	133	31.5	2949	18.4		
2008	111	33.5	1726	15.3	127	34.7	2629	17.3		

**NOTES:** The Police Traffic Crash Report form was modified in 2001. The 'too fast for conditions' data since this change is not strictly comparable to earlier data.

Most crashes have a number of contributing causal factors and many have both alcohol and 'too fast for conditions'. For this reason these tables can not be added together to give the total number of crashes with alcohol/drugs and/or 'too fast for conditions' listed as contributing factors.

# **SECTION 3: TRUCK CASUALTIES AND CRASHES**



TABLE 27: TRUCK CRASHES AND CASUALTIES - HISTORICAL YEAR ENDING 31 DECEMBER

		CRASHES		CASUALTIES							
	ı	nvolving Trucks		Trucks oc	cupants	Non truck occupants					
Year	Injury	Fatal	Total crashes	Injured	Killed	Injured	Killed	Total casualties			
1980	575	63	638	190	15	693	53	951			
1981	569	76	645	186	16	712	75	989			
1982	602	87	689	246	12	670	89	1017			
1983	606	67	673	203	4	675	80	962			
1984	701	85	786	237	13	820	86	1156			
1985	785	99	884	271	15	905	99	1290			
1986	833	83	916	274	15	903	84	1276			
1987	823	90	913	309	16	859	95	1279			
1988	767	76	843	307	11	786	83	1187			
1989	692	106	798	272	14	795	122	1203			
1990	801	85	886	280	7	893	96	1276			
1991	661	81	742	291	15	681	82	1069			
1992	672	77	749	258	6	736	93	1093			
1993	758	87	845	297	12	783	94	1186			
1994	782	96	878	331	24	851	97	1303			
1995	859	105	964	380	13	890	105	1388			
1996	792	77	869	359	26	784	68	1237			
1997	698	85	783	308	12	720	86	1126			
1998	649	75	724	282	11	702	76	1071			
1999	625	97	722	288	17	637	100	1042			
2000	545	75	620	241	16	519	78	854			
2001	620	76	696	284	13	634	77	1008			
2002	746	69	815	337	13	687	59	1096			
2003	765	62	827	349	16	650	58	1073			
2004	829	80	909	401	19	724	70	1214			
2005	837	72	909	367	21	766	71	1225			
2006	806	76	882	375	15	766	71	1227			
2007	871	68	939	396	10	780	64	1250			
2008	889	53	942	373	7	788	51	1219			

FIGURE 18: CASUALTIES FROM TRUCK CRASHES AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES

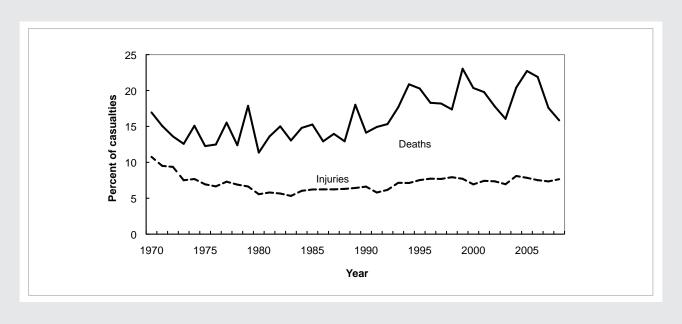


TABLE 28: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING TRUCKS ON OPEN AND **URBAN ROADS** YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	;		OPEN ROADS		UNKNOWN AREA	
Movement Classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	20	2.2	2	52	5.8	12	-	72
Head on (not overtaking)	21	2.4	7	70	7.9	17	-	91
LOSS CONTROL OR OFF ROAD:					'	,	'	'
On straight	20	2.2	5	44	4.9	14	-	64
While cornering	22	2.5	7	123	13.8	43	-	145
Collision with obstruction	47	5.3	15	15	1.7	8	-	62
Rear end	48	5.4	6	68	7.6	12	-	116
INTERSECTIONS OR DRIVEWAYS						,	'	'
Turning versus same direction	42	4.7	2	31	3.5	1	-	73
Crossing no turns	34	3.8	6	14	1.6	2	-	48
Crossing vehicle turning	35	3.9	4	22	2.5	5	-	57
Vehicles merging	18	2	1	7	0.8	3	-	25
Right turn against	29	3.3	3	19	2.1	3	-	48
Vehicle manoeuvring	28	3.1	6	10	1.1	4	-	38
Pedestrian crossing road	14	1.6	1	3	0.3	-	-	17
Pedestrian other	10	1.1	1	1	0.1	-	-	11
Miscellaneous	8	0.9	2	14	1.6	3	-	22
TOTALS	396	44.5	68	493	55.5	127	-	889

NOTE: This table does not include fatal crashes (see Table 29).

TABLE 29: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING TRUCKS ON OPEN AND **URBAN ROADS** YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	;		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	1	1.9	1	1	1.9	1	-	2
Head on (not overtaking)	3	5.7	2	22	41.5	7	-	25
LOSS CONTROL OR OFF ROAD:			,	,		,	,	'
On straight	-	-	-	2	3.8	-	-	2
While cornering	-	-	-	3	5.7	1	-	3
Collision with obstruction	2	3.8	1	-	-	-	-	2
Rear end	-	-	-	2	3.8	-	-	2
INTERSECTIONS OR DRIVEWAYS:			1			1	1	
Turning versus same direction	-	-	-	-	-	-	-	-
Crossing no turns	2	3.8	1	-	-	-	-	2
Crossing vehicle turning	-	-	-	4	7.5	1	-	4
Vehicles merging	-	-	-	-	-	-	-	-
Right turn against	2	3.8	1	1	1.9	-	-	3
Vehicle manoeuvring	1	1.9	-	1	1.9	-	-	2
Pedestrian crossing road	4	7.5	1	-	-	-	-	4
Pedestrian other	-	-	-	1	1.9	1	-	1
Miscellaneous	-	-	-	1	1.9	-	-	1
TOTALS	15	28.3	7	38	71.7	11	-	53

**NOTES:** A truck driver can be involved in an accident and escape injury or death.

For movement classification see Note 9(a).

For area classification see Note 11.

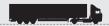


## TABLE 30: CRASHES INVOLVING TRUCKS BY TIME OF DAY AND DAY OF WEEK

YEAR ENDED 31 DECEMBER 2008

Time of Day	Monda	у	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	у	Sunday		TOTALS	5
Midnight to 12.59am	2	(-)	-	(-)	3	(-)	3	(-)	2	(-)	2	(-)	-	(-)	12	(-)
1am to 1.59am	-	(-)	1	(-)	2	(-)	1	(1)	3	(-)	3	(-)	1	(-)	11	(1)
2am to 2.59am	1	(-)	4	(-)	-	(-)	-	(1)	3	(-)	3	(-)	2	(1)	13	(2)
3am to 3.59am	-	(-)	1	(-)	4	(-)	2	(-)	-	(-)	1	(-)	1	(-)	9	(-)
4am to 4.59am	2	(-)	4	(-)	2	(1)	2	(-)	1	(1)	3	(-)	-	(-)	14	(2)
5am to 5.59am	2	(-)	7	(1)	2	(-)	3	(-)	2	(1)	2	(-)	1	(-)	19	(2)
6am to 6.59am	6	(-)	9	(1)	4	(-)	5	(-)	3	(1)	3	(-)	-	(1)	30	(3)
7am to 7.59am	10	(-)	6	(-)	10	(-)	10	(-)	5	(-)	4	(-)	2	(-)	47	(-)
8am to 8.59am	7	(1)	15	(-)	17	(1)	18	(1)	9	(-)	11	(-)	5	(-)	82	(3)
9am to 9.59am	6	(-)	11	(-)	6	(-)	11	(-)	13	(-)	8	(-)	4	(-)	59	(-)
10am to 10.59am	14	(1)	6	(-)	10	(1)	10	(-)	12	(1)	5	(-)	2	(-)	59	(3)
11am to 11.59am	12	(-)	10	(-)	11	(2)	5	(-)	12	(-)	4	(-)	2	(-)	56	(2)
noon to 12.59am	7	(1)	10	(-)	10	(2)	13	(-)	7	(1)	5	(-)	1	(2)	53	(6)
1pm to 1.59pm	11	(-)	12	(1)	9	(1)	14	(-)	13	(-)	8	(2)	3	(-)	70	(4)
2pm to 2.59pm	9	(-)	14	(1)	10	(-)	9	(3)	19	(-)	3	(1)	3	(-)	67	(5)
3pm to 3.59pm	11	(1)	21	(1)	13	(-)	11	(-)	12	(-)	8	(1)	2	(-)	78	(3)
4pm to 4.59pm	17	(1)	9	(-)	7	(-)	12	(1)	11	(-)	2	(1)	1	(-)	59	(3)
5pm to 5.59pm	4	(-)	8	(-)	11	(1)	3	(1)	5	(1)	1	(-)	3	(-)	35	(3)
6pm to 6.59pm	5	(-)	6	(1)	4	(1)	8	(-)	3	(-)	1	(-)	6	(-)	33	(2)
7pm to 7.59pm	4	(-)	4	(-)	4	(-)	1	(-)	4	(1)	1	(-)	3	(1)	21	(2)
8pm to 8.59pm	2	(1)	2	(-)	3	(2)	3	(1)	3	(-)	4	(-)	2	(-)	19	(4)
9pm to 9.59pm	2	(-)	4	(-)	1	(-)	2	(-)	2	(-)	1	(1)	-	(-)	12	(1)
10pm to 10.59pm	-	(-)	3	(-)	3	(-)	1	(-)	3	(-)	3	(-)	1	(-)	14	(-)
11pm to 11.59pm	3	(-)	1	(-)	-	(-)	4	(-)	5	(1)	-	(-)	-	(1)	13	(2)
Unknown time	-	(-)	1	(-)	1	(-)	-	(-)	2	(-)	-	(-)	-	(-)	4	(-)
TOTALS	137	(6)	169	(6)	147	(12)	151	(9)	154	(8)	86	(6)	45	(6)	889	(53)

**NOTE:** The figures in brackets are fatal accidents and are not included in the adjacent totals.



# **SECTION 4: MOTORCYCLE CASUALTIES AND CRASHES**



TABLE 31: MOTORCYCLE RIDER AND PILLION CASUALTIES HISTORICAL YEAR ENDING 31 DECEMBER

	Motor cy	cle riders	Motor cv	cle pillions	Total casualties			
Year	Injured	Killed	Injured	Killed	Injured	Killed		
1951	885	42	232	5	1117	47		
1952	1081	58	257	8	1338	66		
1953	1039	58	254	14	1293	72		
1954	1056	67	256	6	1312	73		
1955	1067	73	228	7	1295	80		
1956	1048	35	221	2	1269	37		
1957	1169	42	228	6	1397	48		
1958	1391	42	238	4	1629	46		
1959	1404	34	269	3	1673	37		
1960	1388	31	239	5	1627	36		
1961	1420	38	209	5	1629	43		
1962	1473	45	276	1	1749	46		
1963	1473	38	238	6	1711	44		
1964	1748	37	268	3	2016	40		
1965	1779	41	282	7	2061	48		
1966	1709	40	363	2	2072	42		
1967	1638	41	280	5	1918	46		
1968	1537	24	270	4	1807	28		
1969	1587	29	322	7	1909	36		
1970	1711	40	366	3	2077	43		
1971	2381	44	530	8	2911	52		
1972	3056	67	710	12	3766	79		
1973	3420	106	804	24	4224	130		
1974	3406	88	686	19	4092	107		
1975	3077	79	548	17	3625	96		
1976	2828	80	512	12	3340	92		
1977	2581	79	435	19	3016	98		
1978	2281	91	432	13	2713	104		
1979	2406	82	404	8	2810	90		
1980	2769	79	382	12	3151	91		
1981	2944	104	432	12	3376	116		
1982	3069	99	479	14	3548	113		
1983	2932	97	477	10	3409	107		
1984	3360	107	497	18	3857	125		
1985	3390	118	515	14	3905	132		
1986	3253	107	430	20	3683	127		
1987	3066	131	455	14	3521	145		
1988	2498	125	365	21	2863	146		
1989	2153	122 95	303 267	19	2456 2203	141		
1990 1991	1936 1844	64	267	19	2203	114 78		
1991	1606	75	210	13	1816	88		
1992	1402	73	159	-	1561			
1993	1542	61	179	11	1721	80 72		
1994	1379	66	160	12	1539	72		
1996	1112	42	111	6	1223	48		
1997	1039	52	103	4	1142	56		
1998	862	47	107	7	969	54		
1999	714	39	77	3	791	42		
2000	646	29	51	2	697	31		
2001	610	34	59	1	669	35		
2002	696	28	48		744	30		
2003	707	27	54	1	761	28		
2004	669	32	52	2	721	34		
2005	834	33	69	3	903	36		
2006	947	35	70	3	1017	38		
2007	1243	37	93	4	1336	41		
2008	1314		82	2	1396	50		
	1511	10	02		.550	, , , ,		

NOTE: See Note 13.

TABLE 32: MOTORCYCLIST CRASH AND CASUALTY RATES HISTORICAL YEAR ENDING 31 DECEMBER

		Motorcycles		Per 10,000 on road motorcycles					
Year	Motorcycles*	New registrations	Crashes	Crashes	Injuries	- Fatalities			
1951	24779	2937	1125	454	451	19.0			
1952	27469	8125	1367	498	487	24.0			
1953	27634	6459	1323	479	468	26.1			
1954	28627	4915	1353	473	458	25.5			
1955	27031	4747	1350	499	479	29.6			
1956	28588	3710	1236	432	444	12.9			
1957	30145	5016	1424	472	463	15.9			
1958	33531	7467	1591	475	486	13.7			
1959	34093	5354	1627	477	491	10.9			
1960	36377	6520	1634	449	447	9.9			
1961	41689	6999	1641	394	391	10.3			
1962	43084	6505	1742	404	406	10.7			
1963	44159	5935	1717	389	388	10.0			
1964	46743	6854	2001	428	431	8.6			
1965	46362	6611	2011	434	445	10.4			
1966	46201	6126	1972	427	449	9.1			
1967	44989	5223	1865	415	426	10.2			
1968	44480	4521	1739	391	406	6.3			
1969	44364	4991	1815	409	430	8.1			
1970	47144	9339	1938	411	441	9.1			
1971	56441	19155	2668	473	516	9.2			
1972	64706	19937	3450	533	582	12.2			
1973	76674	29521	3918	511	551	17.0			
1974	86779	28321	3857	445	472	12.3			
1975	95730	24407	3440	359	379	10.0			
1976	99412	18187	3161	318	336	9.3			
1977	97956	16577	2909	297	308	10.0			
1978	96781	16435	2571	266	280	10.7			
1979	111798	25270	2769	248	251	8.1			
1980	125701	34691	3076	245	251	7.2			
1981	132730	29428	3273	247	254	8.7			
1982	132963	26655	3347	252	267	8.5			
1983	130407	19430	3249	249	261	8.2			
1984	126357	18662	3559	282	305	9.9			
1985	122756	16736	3642	297	318	10.8			
1986	116892	16518	3378	289	315	10.9			
1987	111985	15613	3179	284	314	12.9			
1988	103648	11321	2739	264	276	14.1			
1989	92945	7492	2352	253	264	15.2			
1990	82437	5808	2116	257	267	13.8			
1991	72676	4711	1963	270	283	10.7			
1992	62748	2830	1743	278	289	14.0			
1993	57493	2901	1521	265	272	13.9			
1994	54799	3700	1632	298	314	13.1			
1995	48917	3855	1497	306	315	15.9			
1996	46000	4462	1195	260	266	10.4			
1997	50040	4703	1102	220	228	11.2			
1998	60458	4678	923	153	160	8.9			
1999	59390	4589	773	130	133	7.1			
2000	58566	4381	676	115	119	5.3			
2001	57836	4549	658	114	116	6.1			
2002	57454	5329	729	127	130	5.2			
2003	56047	6772	747	133	136	5.0			
2004	58659	8869	712	121	123	5.8			
2005	63756	12789	893	140	142	5.6			
2006	75171	15151	988	131	135	5.1			
2007	85356	16655	1296	152	157	4.8			
2008	96952	18833	1378	142	144	5.2			

<sup>\*</sup>NOTE (Table 32): Motorcycles: See Note 16 for details.

From 1998 (the first full year with Continuous Vehicle Licensing) motorcycle numbers include registered motorcycles and mopeds but exclude those with an exempt or restoration licence.

From 1986 to 1997 motorcycle numbers are estimates. Prior to 1986 motorcycle numbers were derived from annual licence transactions.



FIGURE 19: MOTORCYCLISTS AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES

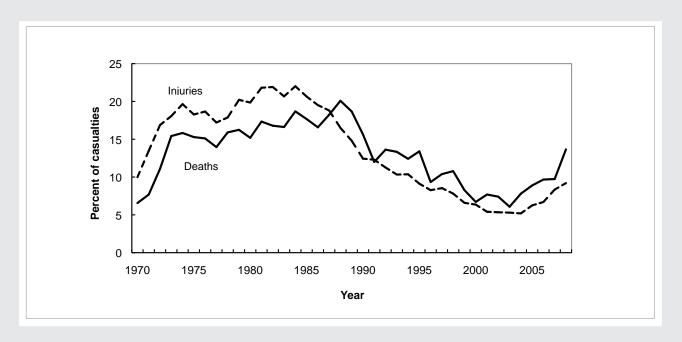


FIGURE 20: PERCENTAGE OF MOTORCYCLE CASUALTIES BY AGE AND SEX

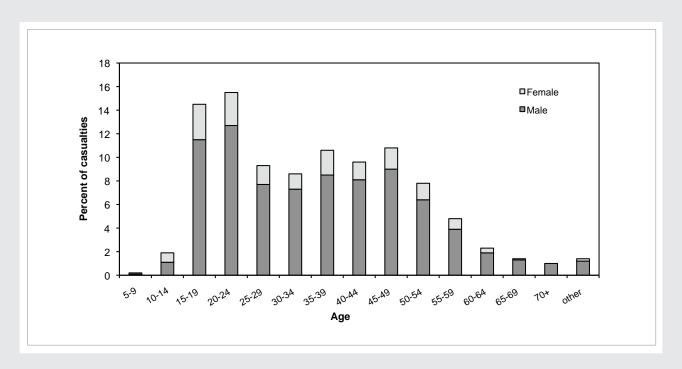


TABLE 33: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING MOTORCYCLISTS ON OPEN AND **URBAN ROADS** YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	28	2.1	4	47	3.5	3	-	75
Head on (not overtaking)	24	1.8	6	35	2.6	4	-	59
LOSS CONTROL OR OFF ROAD:								
On straight	66	5	19	51	3.8	12	-	117
While cornering	116	8.7	29	186	14	28	-	302
Collision with obstruction	17	1.3	7	21	1.6	8	-	38
Rear end	66	5	16	22	1.7	4	-	88
INTERSECTIONS OR DRIVEWAYS:								
Turning versus same direction	74	5.6	9	37	2.8	4	-	111
Crossing no turns	66	5	13	4	0.3	2	-	70
Crossing vehicle turning	106	8	22	14	1.1	2	-	120
Vehicles merging	30	2.3	4	7	0.5	1	-	37
Right turn against	151	11.4	59	15	1.1	4	-	166
Vehicle manoeuvring	100	7.5	22	14	1.1	2	-	114
Pedestrian crossing road	23	1.7	2	1	0.1	-	-	24
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	5	0.4	1	3	0.2	-	-	8
TOTALS	872	65.6	213	457	34.4	74	-	1329

NOTE: This table does not include fatal crashes (see Table 34).

TABLE 34: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING MOTORCYCLISTS ON OPEN AND **URBAN ROADS** YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	1	2	-	-	-	-	-	1
Head on (not overtaking)	-	-	-	9	18.4	-	-	9
LOSS CONTROL OR OFF ROAD:								
On straight	2	4.1	1	2	4.1	-	-	4
While cornering	3	6.1	2	16	32.7	3	-	19
Collision with obstruction	1	2	1	2	4.1	2	-	3
Rear end	-	-	-	-	-	-	-	-
INTERSECTIONS OR DRIVEWAYS:		,			'			
Turning versus same direction	-	-	-	-	-	-	-	-
Crossing no turns	2	4.1	-	1	2	-	-	3
Crossing vehicle turning	2	4.1	1	1	2	-	-	3
Vehicles merging	-	-	-	-	-	-	-	-
Right turn against	2	4.1	2	3	6.1	1	-	5
Vehicle manoeuvring	2	4.1	-	-	-	-	-	2
Pedestrian crossing road	-	-	-	-	-	-	-	-
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
TOTALS	15	30.6	7	34	69.4	6	-	49

**NOTES:** A motorcyclist can be involved in a crash and escape injury or death.

For movement classification see Note 9(a).

For area classification see Note 11.



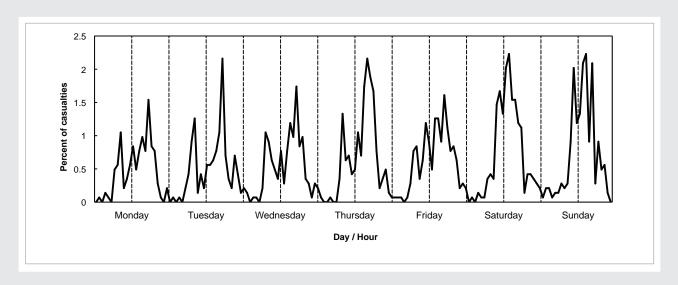
TABLE 35: CRASHES INVOLVING MOTORCYCLISTS BY TIME OF DAY AND DAY OF WEEK

YEAR ENDED 31 DECEMBER 2008

Time of Day	Monda	у	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	ay	Sunday		TOTALS	;
Midnight to 12.59am	-	(-)	-	(-)	2	(-)	2	(1)	1	(-)	2	(-)	3	(-)	10	(1)
1am to 1.59am	1	(-)	1	(-)	1	(1)	1	(-)	1	(-)	-	(-)	1	(-)	6	(1)
2am to 2.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(1)	1	(-)	3	(-)	4	(1)
3am to 3.59am	2	(-)	1	(-)	1	(-)	-	(-)	1	(-)	-	(-)	2	(-)	7	(-)
4am to 4.59am	1	(-)	-	(-)	1	(-)	-	(1)	-	(-)	2	(-)	1	(-)	5	(1)
5am to 5.59am	-	(-)	3	(-)	-	(-)	-	(-)	1	(-)	1	(-)	2	(-)	7	(-)
6am to 6.59am	7	(-)	6	(-)	3	(-)	-	(-)	4	(-)	1	(-)	2	(-)	23	(-)
7am to 7.59am	7	(-)	14	(-)	15	(-)	7	(-)	11	(-)	4	(-)	3	(1)	61	(1)
8am to 8.59am	15	(-)	18	(-)	14	(-)	20	(-)	12	(-)	6	(-)	3	(-)	88	(-)
9am to 9.59am	3	(-)	3	(-)	9	(-)	9	(-)	5	(-)	5	(-)	4	(-)	38	(-)
10am to 10.59am	3	(1)	6	(-)	7	(-)	10	(-)	7	(1)	18	(-)	9	(1)	60	(3)
11am to 11.59am	7	(-)	2	(1)	5	(-)	7	(-)	14	(-)	24	(-)	23	(1)	82	(2)
noon to 12.59am	14	(-)	6	(1)	10	(-)	7	(-)	13	(-)	17	(-)	13	(2)	80	(3)
1pm to 1.59pm	7	(1)	7	(1)	4	(-)	14	(-)	7	(-)	24	(1)	18	(1)	81	(4)
2pm to 2.59pm	11	(-)	9	(-)	10	(-)	10	(-)	17	(-)	24	(4)	22	(3)	103	(7)
3pm to 3.59pm	13	(-)	11	(-)	17	(-)	26	(-)	16	(2)	18	(-)	25	(3)	126	(5)
4pm to 4.59pm	10	(1)	13	(-)	14	(1)	29	(1)	13	(-)	17	(3)	12	(1)	108	(7)
5pm to 5.59pm	21	(-)	32	(-)	24	(-)	26	(-)	23	(-)	14	(-)	26	(-)	166	(-)
6pm to 6.59pm	12	(-)	11	(-)	12	(-)	21	(1)	17	(-)	14	(2)	4	(-)	91	(3)
7pm to 7.59pm	10	(-)	5	(-)	13	(-)	8	(2)	11	(-)	2	(-)	11	(1)	60	(3)
8pm to 8.59pm	3	(1)	3	(-)	5	(-)	4	(-)	11	(-)	6	(-)	7	(-)	39	(1)
9pm to 9.59pm	1	(-)	8	(-)	4	(-)	5	(-)	9	(-)	5	(-)	6	(1)	38	(1)
10pm to 10.59pm	-	(-)	5	(-)	1	(-)	6	(-)	2	(1)	4	(-)	1	(-)	19	(1)
11pm to 11.59pm	2	(-)	2	(-)	3	(1)	2	(-)	4	(-)	3	(1)	-	(-)	16	(2)
Unknown time	1	(-)	1	(1)	1	(-)	2	(-)	2	(1)	2	(-)	2	(-)	11	(2)
TOTALS	151	(4)	167	(4)	176	(3)	216	(6)	202	(6)	214	(11)	203	(15)	1329	(49)

**NOTE:** The figures in brackets are fatal crashes and are not included in the adjacent totals.

FIGURE 21: MOTORCYCLE CASUALTIES BY TIME OF DAY AND DAY OF WEEK



## SECTION 5: PEDAL CYCLIST CASUALTIES AND CRASHES



TABLE 36: PEDAL CYCLIST CASUALTIES AND POPULATION STATISTICS HISTORICAL

YEAR ENDING 31 DECEMBER

				Per 100 000	) population
Year	Population	Injured	Killed	Injured	Killed
1975	3143700	745	18	24	0.6
1976	3163400	736	14	23	0.4
1977	3166400	631	21	20	0.7
1978	3165200	588	30	19	0.9
1979	3163900	623	15	20	0.5
1980	3164100	745	22	24	0.7
1981	3195800	748	21	23	0.7
1982	3229800	881	30	27	0.9
1983	3269500	900	19	28	0.6
1984	3299500	958	31	29	0.9
1985	3311200	1106	21	33	0.6
1986	3316700	1012	22	31	0.7
1987	3349100	1051	18	31	0.5
1988	3356200	1081	20	32	0.6
1989	3384510	1051	20	31	0.6
1990	3429100	1054	27	31	0.8
1991	3449700	1000	22	29	0.6
1992	3485400	941	17	27	0.5
1993	3524800	910	17	26	0.5
1994	3577200	882	15	25	0.4
1995	3643200	813	15	22	0.4
1996	3717400	754	13	20	0.3
1997	3761100	724	12	19	0.3
1998	3790900	626	16	17	0.4
1999	3810700	619	8	16	0.2
2000	3830800	559	19	15	0.5
2001	3850100	696	10	18	0.3
2002	3939100	771	14	20	0.4
2003	4009200	722	6	18	0.1
2004	4060900	716	7	18	0.2
2005	4098300	751	12	18	0.3
2006	4139500	833	9	20	0.2
2007	4228300	880	12	21	0.3
2008	4268600	895	10	21	0.2

**NOTE**: Population from 1997 on is from Statistics NZ INFOS series DPEA.SDBC.

FIGURE 22: PEDAL CYCLISTS AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES

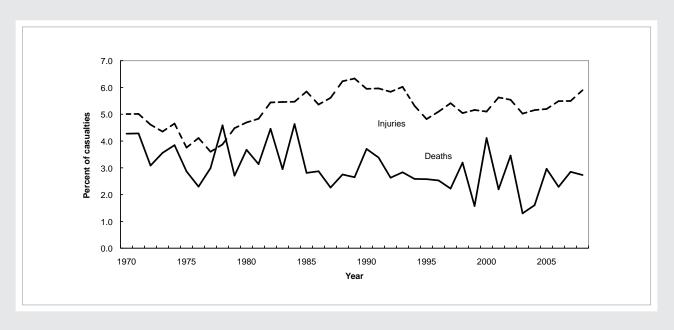


TABLE 37: PEDAL CYCLIST CASUALTIES AND POPULATION STATISTICS BY AGE GROUP

YEAR ENDING 31 DECEMBER 2008

				Per 100 000 population				
Age group	Population	Injured	Killed	Injured	Killed			
Under 5	299990	3	0	1	0			
5 to 9	287700	26	0	9	0			
10 to 14	301660	116	0	39	0			
15 to 19	322530	108	1	34	0.3			
20 to 24	296630	63	1	21	0.3			
25 to 29	272990	68	0	25	0			
30 to 34	271020	67	1	25	0.4			
35 to 39	312490	70	0	22	0			
40 to 44	314110	104	0	33	0			
45 to 49	319780	71	2	22	0.6			
50 to 54	276430	59	0	21	0			
55 to 59	243900	41	1	17	0.4			
60 to 64	211630	30	2	14	0.9			
65 to 69	165950	11	1	7	0.6			
70 to 74	125890	9	1	7	0.8			
75 to 79	104570	3	0	3	0			
80 and over	141360	2	0	1	0			
Unknown age	0	44	0	-	-			
TOTAL	4268630	895	10	21	0.2			

**NOTE:** Population is the resident population as at 30 June. INFOS series DAEA.SJCG01 etc.

FIGURE 23: PERCENTAGE OF CYCLIST CASUALTIES BY AGE AND GENDER

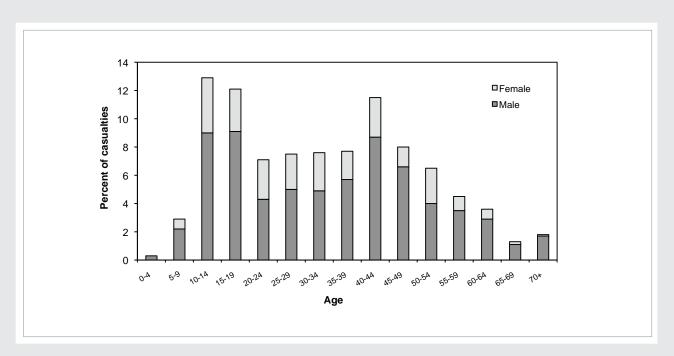




TABLE 38: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING PEDAL CYCLISTS ON OPEN AND **URBAN ROADS** YEAR ENDED 31 DECEMBER 2008

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	62	7.0	5	23	2.6	2	-	85
Head on (not overtaking)	21	2.4	4	3	0.3	-	-	24
LOSS CONTROL OR OFF ROAD:						'	'	
On straight	2	0.2	1	3	0.3	-	-	5
While cornering	6	0.7	1	2	0.2	-	-	8
Collision with obstruction	76	8.6	8	5	0.6	1	-	81
Rear end	22	2.5	3	11	1.2	-	-	33
INTERSECTIONS OR DRIVEWAYS				,		,	,	
Turning versus same direction	75	8.5	9	6	0.7	-	-	81
Crossing no turns	128	14.5	23	5	0.6	1	-	133
Crossing vehicle turning	112	12.7	25	8	0.9	1	-	120
Vehicles merging	80	9.0	10	3	0.3	-	-	83
Right turn against	121	13.7	23	7	0.8	2	-	128
Vehicle manoeuvring	92	10.4	9	3	0.3	-	-	95
Pedestrian crossing road	4	0.5	2	-	-	-	-	4
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	2	0.2	2	2	0.2	-	-	4
TOTALS	803	90.8	125	81	9.2	7	-	884

NOTE: This table does not include fatal crashes (see Table 39).

TABLE 39: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING PEDAL CYCLISTS ON OPEN AND **URBAN ROADS** YEAR ENDING 31 DECEMBER 2008

		URBAN ROADS	;		OPEN ROADS	UNKNOWN AREA		
Movement Classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	2	20	1	1	10	-	-	3
Head on (not overtaking)	-	-	-	-	-	-	-	-
LOSS CONTROL OR OFF ROAD:					,	,	,	
On straight	-	-	-	-	-	-	-	-
While cornering	-	-	-	-	-	-	-	-
Collision with obstruction	1	10	-	-	-	-	-	1
Rear end	-	-	-	4	40	1	-	4
INTERSECTIONS OR DRIVEWAYS:			,		'	,	,	'
Turning versus same direction	-	-	-	-	-	-	-	-
Crossing no turns	1	10	-	-	-	-	-	1
Crossing vehicle turning	-	-	-	-	-	-	-	-
Vehicles merging	1	10	-	-	-	-	-	1
Right turn against	-	-	-	-	-	-	-	-
Vehicle manoeuvring	-	-	-	-	-	-	-	-
Pedestrian crossing road	-	-	-	-	-	-	-	-
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	
TOTALS	5	50	1	5	50	1	-	10

**NOTE**: A pedal cyclist can be involved in a crash and escape injury or death. For movement classification see Note 9(a).

For area classification see Note 11.

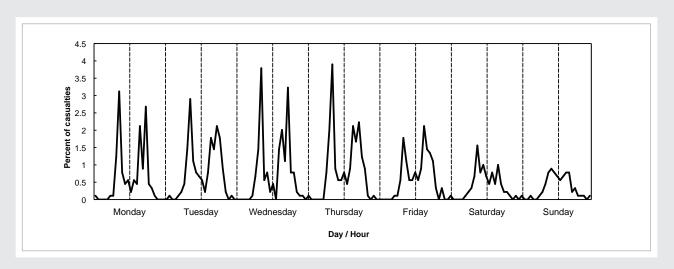
TABLE 40: CRASHES INVOLVING PEDAL CYCLISTS BY TIME OF DAY AND DAY OF WEEK

YEAR ENDED 31 DECEMBER 2008

Time of Day	Monda	У	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturd	ay	Sunday		TOTALS	5
Midnight to 12.59am	1	(-)	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)	1	(-)	4	(-)
1am to 1.59am	-	(-)	1	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)
2am to 2.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
3am to 3.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)
4am to 4.59am	-	(-)	1	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)
5am to 5.59am	1	(-)	2	(-)	1	(-)	-	(-)	1	(-)	1	(-)	-	(-)	6	(-)
6am to 6.59am	1	(-)	4	(-)	6	(-)	7	(-)	1	(-)	2	(-)	1	(-)	22	(-)
7am to 7.59am	11	(-)	13	(-)	13	(-)	18	(-)	5	(-)	3	(-)	2	(-)	65	(-)
8am to 8.59am	27	(1)	26	(-)	34	(-)	34	(1)	15	(-)	5	(-)	4	(-)	145	(2)
9am to 9.59am	7	(-)	9	(-)	5	(-)	8	(-)	10	(-)	12	(1)	6	(-)	57	(1)
10am to 10.59am	4	(-)	7	(-)	6	(1)	5	(-)	5	(-)	7	(-)	7	(1)	41	(2)
11am to 11.59am	5	(-)	4	(1)	2	(-)	5	(-)	5	(-)	8	(-)	7	(-)	36	(1)
noon to 12.59am	2	(-)	5	(-)	4	(-)	7	(-)	7	(-)	6	(-)	6	(-)	37	(-)
1pm to 1.59pm	5	(-)	2	(-)	-	(-)	4	(-)	5	(-)	4	(-)	6	(-)	26	(-)
2pm to 2.59pm	4	(-)	7	(-)	13	(-)	8	(-)	8	(-)	7	(-)	6	(-)	53	(-)
3pm to 3.59pm	19	(-)	15	(-)	18	(-)	18	(-)	19	(-)	4	(-)	7	(-)	100	(-)
4pm to 4.59pm	8	(-)	12	(-)	10	(-)	15	(-)	13	(-)	9	(-)	7	(-)	74	(-)
5pm to 5.59pm	23	(1)	20	(-)	28	(-)	20	(1)	12	(-)	4	(-)	2	(-)	109	(2)
6pm to 6.59pm	4	(-)	15	(1)	7	(-)	11	(-)	10	(-)	2	(-)	3	(-)	52	(1)
7pm to 7.59pm	3	(-)	8	(-)	7	(-)	6	(-)	3	(-)	2	(-)	1	(-)	30	(-)
8pm to 8.59pm	1	(-)	2	(-)	1	(-)	1	(-)	-	(-)	1	(-)	1	(-)	7	(-)
9pm to 9.59pm	-	(-)	-	(-)	1	(-)	-	(-)	3	(-)	-	(-)	-	(1)	4	(1)
10pm to 10.59pm	-	(-)	1	(-)	1	(-)	1	(-)	-	(-)	1	(-)	-	(-)	4	(-)
11pm to 11.59pm	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)
Unknown time	1	(-)	2	(-)	-	(-)	2	(-)	-	(-)	2	(-)	1	(-)	8	(-)
TOTALS	127	(2)	156	(2)	157	(1)	171	(2)	122	(-)	81	(1)	70	(2)	884	(10)

**NOTE:** The figures in brackets are fatal crashes and are not included in the adjacent totals.

FIGURE 24: CYCLIST CASUALTIES BY TIME OF DAY AND DAY OF WEEK





## SECTION 6: PEDESTRIAN CASUALTIES AND CRASHES



TABLE 41: PEDESTRIAN CASUALTIES AND POPULATION STATISTICS HISTORICAL

YEAR ENDING 31 DECEMBER

				Per 100 000	population
Year	Population	Injured	Killed	Injured	Killed
1975	3143700	1760	112	56	3.6
1976	3163400	1473	102	47	3.2
1977	3166400	1447	124	46	3.9
1978	3165200	1224	116	39	3.7
1979	3163900	1157	106	37	3.4
1980	3164100	1246	98	39	3.1
1981	3195800	1121	104	35	3.3
1982	3229800	1128	89	35	2.8
1983	3269500	1144	103	35	3.2
1984	3299500	1343	119	41	3.6
1985	3311200	1225	125	37	3.8
1986	3316700	1265	112	38	3.4
1987	3349100	1256	110	38	3.3
1988	3356200	1119	83	33	2.5
1989	3384510	1039	81	31	2.4
1990	3429100	1161	104	34	3.0
1991	3449700	1015	88	29	2.6
1992	3485400	1007	76	29	2.2
1993	3524800	949	74	27	2.1
1994	3577200	1063	54	30	1.5
1995	3643200	1053	71	29	1.9
1996	3717400	969	63	26	1.7
1997	3761100	925	54	25	1.4
1998	3790900	930	71	25	1.9
1999	3810700	895	63	24	1.7
2000	3830800	953	35	25	0.9
2001	3850100	986	52	26	1.4
2002	3939100	1065	45	27	1.1
2003	4009200	1058	58	26	1.4
2004	4060900	999	38	25	0.9
2005	4098300	943	31	23	0.8
2006	4139500	960	44	23	1.1
2007	4228300	868	45	21	1.1
2008	4268600	939	31	22	0.7

**NOTE:** Population from 1997 on is from Statistics NZ INFOS series DPEA.SDBC.

FIGURE 25: PEDESTRIANS AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES

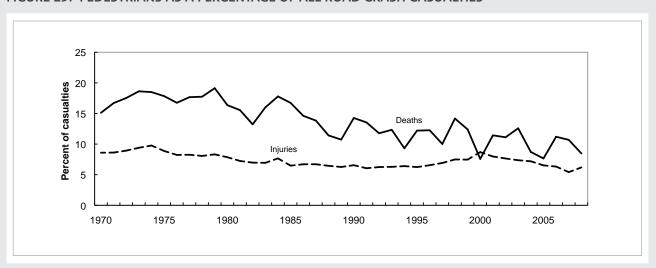


TABLE 42: PEDESTRIAN CASUALTIES AND POPULATION STATISTICS BY AGE GROUPS

YEAR ENDING 31 DECEMBER 2008

				Per 100 000	population
Age group	Population	Injured	Killed	Injured	Killed
Under 5	299990	30	1	10	0.3
5 to 9	287700	76	1	26	0.3
10 to 14	301660	108	2	36	0.7
15 to 19	322530	115	2	36	0.6
20 to 24	296630	82	4	28	1.3
25 to 29	272990	55	2	20	0.7
30 to 34	271020	46	2	17	0.7
35 to 39	312490	40	2	13	0.6
40 to 44	314110	54	2	17	0.6
45 to 49	319780	42	1	13	0.3
50 to 54	276430	38	2	14	0.7
55 to 59	243900	21	2	9	0.8
60 to 64	211630	26	1	12	0.5
65 to 69	165950	33	0	20	0
70 to 74	125890	23	3	18	2.4
75 to 79	104570	29	3	28	2.9
80 and over	141360	31	1	22	0.7
Unknown age	0	90	0	-	-
TOTAL	4268630	939	31	22	0.7

**NOTE:** Population is the resident population as at 30 June. INFOS series DAEA.SJCG01 etc.

FIGURE 26: PERCENTAGE OF PEDESTRIAN CASUALTIES BY AGE AND SEX

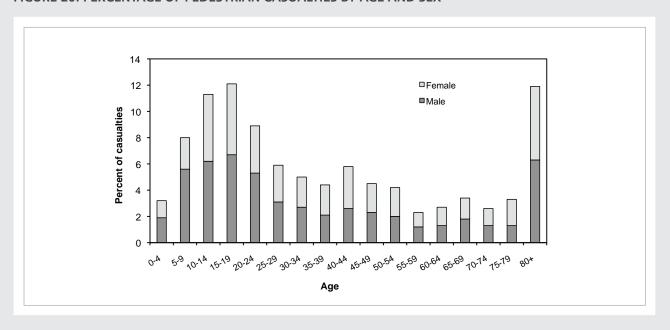




TABLE 43: INJURY CRASHES INVOLVING PEDESTRIANS BY ROAD FEATURE ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2008

		URBAN	ROADS		OPEN ROADS		UNKNOWN AREA	
	At pedestrian	crossing	Not at pedestr	ian crossing				
Road feature	Day	Dark	Day	Dark	Day	Dark	and light	Total
INTERSECTIONS								
Controlled by:								
Traffic signals	3	-	98	37	-	-	-	13
Stop sign	3	1	16	2	-	-	-	2
Roundabout	1	-	13	4	-	-	-	1
Other Give Way sign	8	2	44	16	1	-	-	7
Points man or School Patrol	1	-	-	-	-	-	-	
Uncontrolled	10	1	67	24	-	-	-	10
SUBTOTAL	26	4	238	83	1	-	-	35
NON-INTERSECTIONS								
Bridge	-	-	3	-	-	-	-	
Railway Crossing	-	-	-	-	-	-	-	
Motorway on-off ramp	-	-	-	-	-	-	-	
Raised islands	-	-	33	17	2	1	-	5
Straight road	25	13	272	102	15	6	-	43
Easy curve	1	1	28	10	2	2	-	4
Moderate curve	1	-	6	4	3	1	-	1
Severe curve	-	-	3	2	2	-	-	
Not stated	-	-	-	-	-	-	-	
SUBTOTAL	27	14	345	135	24	10	-	55
TOTAL	53	18	583	218	25	10	-	90

NOTE: For urban/open road classification see Note 11. Fatal crashes are not included in this table (see Table 44).

TABLE 44: FATAL CRASHES INVOLVING PEDESTRIANS BY ROAD FEATURE ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2008

		URBAN	ROADS		OPEN	ROADS	UNKNOWN AREA	
	At pedestriar	At pedestrian crossing		rian crossing				
Road feature	Day	Dark	Day	Dark	Day	Dark	and light	Total
INTERSECTIONS								
Controlled by:								
Traffic signals		-	2	-	-	-	-	:
Stop sign			1	1	-	-	-	2
Roundabout			-	-	-	-	-	
Other Give Way sign		-	-	1	-	-	-	,
Points man or school patrol		-	-	-	-	-	-	
Uncontrolled		-	1	1	-	-	-	2
SUBTOTAL		-	4	3	-	-	-	7
NON-INTERSECTIONS								
Bridge		-	-	-	-	-	-	
Railway crossing		-	1	-	-	-	-	•
Motorway on-off ramp			-	-	-	-	-	
Raised islands			1	-	-	-	-	-
Straight road		-	5	6	2	7	-	20
Easy curve		-	-	-	-	1	-	•
Moderate curve		-	-	-	1	-	-	•
Severe curve		-	-	-	-	-	-	
Not stated		-	-	-	-	-	-	
SUBTOTAL								24
TOTAL			11	9	3	8	_	31

NOTE: For urban/open road classification see Note 11.



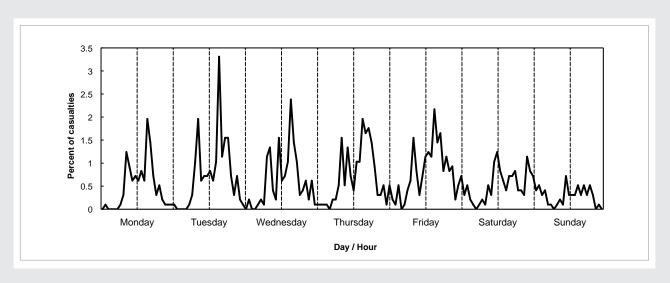
TABLE 45: CRASHES INVOLVING PEDESTRIANS BY TIME OF DAY AND DAY OF WEEK

YEAR ENDED 31 DECEMBER 2008

Time of Day	Monda	у	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	ıy	Sunday		TOTALS	5
Midnight to 12.59am	-	(-)	1	(-)	-	(-)	1	(-)	5	(-)	5	(2)	5	(2)	17	(4)
1am to 1.59am	1	(-)	-	(-)	2	(-)	1	(-)	2	(-)	3	(-)	3	(1)	12	(1)
2am to 2.59am	-	(-)	-	(-)	-	(-)	1	(-)	-	(1)	4	(-)	5	(-)	10	(1)
3am to 3.59am	-	(-)	-	(-)	-	(-)	1	(-)	4	(-)	-	(2)	3	(-)	8	(2)
4am to 4.59am	-	(-)	-	(-)	-	(1)	-	(-)	-	(-)	1	(-)	4	(-)	5	(1)
5am to 5.59am	-	(-)	1	(-)	1	(1)	1	(-)	1	(-)	-	(-)	1	(-)	5	(1)
6am to 6.59am	1	(-)	3	(-)	1	(-)	2	(-)	4	(-)	1	(-)	1	(-)	13	(-)
7am to 7.59am	3	(-)	9	(1)	11	(-)	5	(-)	6	(-)	2	(-)	-	(-)	36	(1)
8am to 8.59am	11	(1)	19	(-)	12	(1)	13	(1)	15	(-)	1	(-)	1	(-)	72	(3)
9am to 9.59am	8	(1)	5	(-)	4	(-)	5	(-)	8	(-)	5	(-)	2	(-)	37	(1)
10am to 10.59am	6	(-)	7	(-)	2	(-)	13	(-)	3	(-)	3	(-)	1	(-)	35	(-)
11am to 11.59am	7	(-)	7	(-)	12	(1)	7	(-)	7	(-)	10	(-)	5	(-)	55	(1)
noon to 12.59am	5	(1)	5	(-)	6	(-)	4	(-)	11	(-)	11	(-)	3	(-)	45	(1)
1pm to 1.59pm	8	(-)	6	(-)	7	(-)	10	(-)	12	(-)	8	(-)	3	(-)	54	(-)
2pm to 2.59pm	6	(-)	8	(1)	8	(1)	10	(-)	11	(-)	5	(-)	3	(-)	51	(2)
3pm to 3.59pm	17	(1)	32	(-)	22	(-)	18	(-)	19	(1)	4	(-)	5	(-)	117	(2)
4pm to 4.59pm	14	(-)	11	(-)	13	(1)	16	(-)	14	(-)	5	(-)	3	(-)	76	(1)
5pm to 5.59pm	7	(-)	14	(-)	9	(1)	17	(-)	16	(-)	6	(-)	4	(1)	73	(2)
6pm to 6.59pm	3	(-)	15	(-)	3	(-)	13	(1)	8	(-)	8	(-)	3	(-)	53	(1)
7pm to 7.59pm	5	(-)	7	(-)	4	(-)	8	(-)	10	(1)	4	(-)	4	(-)	42	(1)
8pm to 8.59pm	2	(-)	3	(-)	6	(-)	3	(-)	8	(-)	4	(-)	3	(-)	29	(-)
9pm to 9.59pm	1	(-)	4	(2)	2	(-)	3	(-)	6	(1)	3	(-)	-	(-)	19	(3)
10pm to 10.59pm	1	(-)	2	(-)	5	(-)	4	(1)	2	(-)	10	(-)	1	(-)	25	(1)
11pm to 11.59pm	1	(-)	1	(-)	1	(-)	1	(-)	4	(1)	7	(-)	-	(-)	15	(1)
Unknown time	-	(-)	2	(-)	-	(-)	-	(-)	-	(-)	1	(-)	-	(-)	3	(-)
TOTALS	107	(4)	162	(4)	131	(7)	157	(3)	176	(5)	111	(4)	63	(4)	907	(31)

**NOTE:** The figures in brackets are fatal crashes and are not included in the adjacent totals.

FIGURE 27: PERCENTAGE OF PEDESTRIAN CASUALTIES BY TIME OF DAY AND DAY OF WEEK



## SECTION 7: LOCAL BODY CASUALTIES AND CRASHES



TABLE 46: CRASHES AND CASUALTIES BY POPULATION CENTRE\* YEAR ENDING 31 DECEMBER 2008

Local Body Name	Population (000)	Injury crashes	Fatal crashes	Total injuries	Total deaths	Crashes per 10,000 population	Casualties per 10,000 Population
CITIES			_				
North Shore	223.0	408	3	480	4	18	22
Waitakere	201.3	440	3	561	3	22	28
Auckland	438.1	1146	8	1421	8	26	33
Manukau	361.9	651	15	835	20	18	24
Hamilton	138.5	362	1	462	1	26	33
Napier	57.0	152	-	181	-	27	32
Palmerston North	79.3	158	8	210	8	21	28
Porirua	51.0	83	4	105	4	17	21
Upper Hutt	40.2	81	3	95	3	21	24
Hutt	101.7	262	3	330	4	26	33
Wellington	192.8	549	5	664	6	29	35
Nelson	44.7	109	1	129	1	25	29
Christchurch	369.0	1013	16	1278	16	28	35
Dunedin	123.0	480	4	682	4	39	56
DISTRICTS							
Far North	57.9	174	8	265	10	31	48
Whangarei	78.2	214	15	296	15	29	40
Kaipara	18.6	74	4	100	4	42	56
Rodney	96.4	293	9	421	9	31	45
Papakura	48.3	125	2	178	2	26	37
Franklin	63.2	195	9	295	9	32	48
Thames Coromandel	26.8	78	3	115	3	30	44
Hauraki	17.7	68	7	87	7	42	53
Waikato	46.8	181	7	252	10	40	56
Matamata-Piako	31.4	125	15	196	16	45	68
Waipa	44.7	117	7	170	7	28	40
Otorohanga	9.2	46	-	59	-	50	64
South Waikato	22.8	64	8	98	12	32	48
Waitomo	9.6	46	2	58	2	50	63
Taupo	33.4	118	14	180	15	40	58
Western Bay of Plenty	44.4	108	6	171	6	26	40
Tauranga	110.5	166	3	202	5	15	19
Rotorua	68.1	175	6	250	6	27	38
Whakatane	34.4	90	6	143	6	28	43
Kawerau	7.1	3	1	4	1	6	7
Opotiki	9.1	30	4	39	5	38	49
Gisborne	45.9	146	7	219	8	33	50
Wairoa	8.5	28	5	37	6	39	51
Hastings	73.9	215	7	300	7	30	42
Central Hawke's Bay	13.3	34	-	52	-	26	39
New Plymouth	71.8	212	4	283	4	30	40
Stratford	9.1	33	1	48	1	37	54
South Taranaki	26.8	72	2	123	2	28	47
Ruapehu	13.7	52	3	69	3	40	53
Wanganui	43.4	98	1	126	1	23	29
	15.0	56	3	80	3	40	56

NOTE: \* Motorways are included in the adjacent population centre. Populations are resident populations from INFOS series DPEA.SDACEA.MZ.

### CONTINUED

TABLE 46: CRASHES AND CASUALTIES BY POPULATION CENTRE\* YEAR ENDING 31 DECEMBER 2008

Local Body Name	Population (000)	Injury crashes	Fatal crashes	Total injuries	Total deaths	Crashes per 10,000 population	Casualties per 10,000 Population
DISTRICTS							
Manawatu	29.3	99	6	150	8	36	54
Tararua	17.8	67	3	90	3	39	52
Horowhenua	30.6	94	4	133	5	32	45
Kapiti Coast	48.4	79	1	101	1	17	21
Masterton	23.2	68	1	90	1	30	39
Carterton	7.4	17	-	22	-	23	30
South Wairarapa	9.2	29	2	35	2	34	40
Tasman	46.5	131	8	192	8	30	43
Marlborough	44.5	123	1	170	1	28	38
Kaikoura	3.8	18	2	24	2	53	69
Buller	10.0	35	2	55	2	37	57
Grey	13.7	40	4	55	5	32	44
Westland	8.8	41	1	63	1	48	73
Hurunui	10.9	64	2	96	2	61	90
Waimakariri	46.1	78	3	105	4	18	24
Selwyn	37.5	103	4	144	7	29	40
Ashburton	28.7	58	7	83	7	23	31
Timaru	43.9	92	4	121	4	22	29
Mackenzie	4.0	19	3	29	3	56	81
Waimate	7.5	21	3	26	3	32	39
Chatham Island	0.6	3	1	3	1	63	63
Waitaki	20.7	87	4	125	4	44	62
Central Otago	17.7	64	5	99	6	39	59
Queenstown-Lakes	26.4	90	3	137	3	35	53
Clutha	17.4	77	3	113	4	46	67
Southland	29.1	159	4	235	4	56	82
Gore	12.3	40	4	62	5	36	55
Invercargill	51.6	190	3	267	3	37	52

**NOTE:** \* Motorways are included in the adjacent population centre. Populations are resident populations from INFOS series DPEA.SDACEA.MZ.



TABLE 47: PEDESTRIAN, MOTORCYCLE AND PEDAL CYCLE CRASHES BY POPULATION CENTRE \* YEAR ENDING 31 DECEMBER 2008

	Number of crashes									
Local Body Name	Pedestrians		Motorcycli		Pedal cy	clists				
CITIES										
North Shore	46	(1)	44	(1)	28	(-)				
Waitakere	36	(-)	44	(1)	27	(-)				
Auckland	132	(-)	140	(2)	94	(1)				
Manukau	69	(3)	54	(3)	32	(-)				
Hamilton	37	(-)	50	(-)	43	(-)				
Napier	11	(-)	25	(-)	22	(-)				
Palmerston North	9	(-)	21	(3)	25	(-)				
Porirua	6	(2)	9	(1)	5	(-)				
Upper Hutt	8	(-)	15	(-)	9	(1)				
Hutt	32	(1)	25	(-)	26	(1)				
Wellington	96	(1)	72	(1)	88	(-)				
Nelson	9	(-)	19	(-)	23	(-)				
Christchurch	88	(4)	113	(3)	156	(-)				
Dunedin	59	(2)	40	(-)	34	(-)				
Dunedin	39	(2)	40	(-)	54	(-)				
DISTRICTS										
	8	(2)	10	(1)	_	()				
Far North	16	(2)	18	(1)	5	(-)				
Whangarei		(-)	24	(3)	5	(2)				
Kaipara	1	(-)	10	(-)	-	(-)				
Rodney	13	(2)	40	(1)	10	(-)				
Papakura	7	(-)	15	(-)	5	(-)				
Franklin	10	(-)	18	(-)	9	(-)				
Thames Coromandel	1	(-)	14	(1)	2	(-)				
Hauraki	2	(-)	7	(2)	2	(-)				
Waikato	7	(-)	17	(-)	4	(-)				
Matamata-Piako	6	(1)	13	(-)	4	(-)				
Waipa	5	(-)	11	(1)	6	(-)				
Otorohanga	-	(-)	10	(-)	1	(-)				
South Waikato	4	(-)	9	(1)	4	(-)				
Waitomo	-	(-)	5	(-)	2	(-)				
Taupo	5	(1)	12	(4)	5	(1)				
Western Bay of Plenty	3	(-)	12	(-)	2	(-)				
Tauranga	19	(1)	31	(-)	17	(-)				
Rotorua	14	(1)	13	(-)	16	(-)				
Whakatane	4	(-)	9	(2)	5	(-)				
Kawerau	-	(-)	-	(-)	-	(-)				
Opotiki	-	(-)	6	(1)	1	(-)				
Gisborne	10	(-)	12	(-)	19	(-)				
Wairoa	2	(-)	1	(1)	-	(-)				
Hastings	9	(-)	26	(1)	23	(-)				
Central Hawkes Bay	1	(-)	3	(-)	-	(-)				
New Plymouth	17	(-)	40	(1)	11	(-)				
Stratford	2	(-)	2	(-)	-	(-)				
South Taranaki	8	(-)	5	(-)	1	(-)				
Ruapehu	2	(-)	1	(1)	1	(-)				
Wanganui	8	(-)	16	(-)	10	(-)				
Rangitikei	2	(-)	7	(1)	-	(-)				

**NOTE:** \* Motorways are included in the adjacent population centre. Populations are resident populations from INFOS series DPEA.SDACEA.MZ.

#### CONTINUED

### TABLE 47: PEDESTRIAN, MOTORCYCLE AND PEDAL CYCLE CRASHES BY POPULATION CENTRE \* YEAR ENDING 31 DECEMBER 2008

			Number o	of crashes		
Local Body Name	Pedesti	rians	Motoro	cyclists	Pedal c	yclists
DISTRICTS						
Manawatu	5	(-)	12	(-)	6	(-)
Tararua	2	(-)	4	(2)	1	(-)
Horowhenua	5	(-)	14	(-)	3	(-)
Kapiti Coast	5	(-)	10	(-)	5	(-)
Masterton	10	(-)	15	(1)	6	(-)
Carterton	4	(-)	5	(-)	-	(-)
South Wairarapa	-	(-)	3	(1)	1	(-)
Tasman	4	(2)	23	(-)	8	(-)
Marlborough	3	(-)	17	(-)	10	(-)
Kaikoura	-	(-)	3	(1)	1	(-)
Buller	1	(1)	8	(-)	1	(-)
Grey	2	(1)	5	(-)	4	(-)
Westland	-	(1)	11	(-)	-	(-)
Hurunui	3	(-)	7	(-)	2	(-)
Waimakariri	4	(1)	13	(-)	2	(-)
Selwyn	1	(-)	12	(2)	3	(-)
Ashburton	4	(1)	4	(1)	7	(-)
Timaru	4	(-)	11	(1)	10	(1)
Mackenzie	-	(-)	-	(-)	2	(-)
Waimate	-	(-)	3	(-)	1	(-)
Chatham Island	-	(-)	-	(-)	-	(-)
Waitaki	4	(-)	10	(-)	7	(1)
Central Otago	1	(1)	4	(1)	1	(-)
Queenstown-Lakes	3	(-)	8	(1)	7	(-)
Clutha	2	(-)	9	(-)	-	(-)
Southland	2	(-)	16	(-)	-	(-)
Gore	2	(1)	3	(1)	2	(-)
Invercargill	12	(-)	21	(-)	17	(2)

NOTE: \* Motorways are included in the adjacent population centre. Populations are resident populations from INFOS series DPEA.SDACEA.MZ.



TABLE 48: LOCAL BODY CRASHES AND CASUALTIES YEAR ENDING 31 DECEMBER

City			ber of crash crash happe			2008 Casualties				
Local body names	2004	2005	2006	2007	2008	Fatal injuries	Serious injuries	Minor injuries	Total Casualties	
Auckland	1094	1201	1162	1132	1154	8	150	1271	1429	
Christchurch	717	807	939	1067	1029	16	216	1062	1294	
Dunedin	499	535	475	500	484	4	99	583	686	
Hamilton	274	275	292	368	363	1	58	404	463	
Hutt	188	143	182	275	265	4	42	288	334	
Manukau	552	543	706	702	666	20	105	730	855	
Napier	137	134	136	164	152	-	32	149	181	
Nelson	119	105	111	105	110	1	24	105	130	
North Shore	453	464	472	447	411	4	33	447	484	
Palmerston North	160	183	186	180	166	8	46	164	218	
Porirua	112	105	99	105	87	4	23	82	109	
Upper Hutt	43	72	71	90	84	3	20	75	98	
Waitakere	433	381	397	402	443	3	45	516	564	
Wellington	328	376	412	515	554	6	92	572	670	
Total	5109	5324	5640	6052	5968	82	985	6448	7515	

Continued on opposite page

TABLE 48: LOCAL BODY CRASHES AND CASUALTIES YEAR ENDING 31 DECEMBER

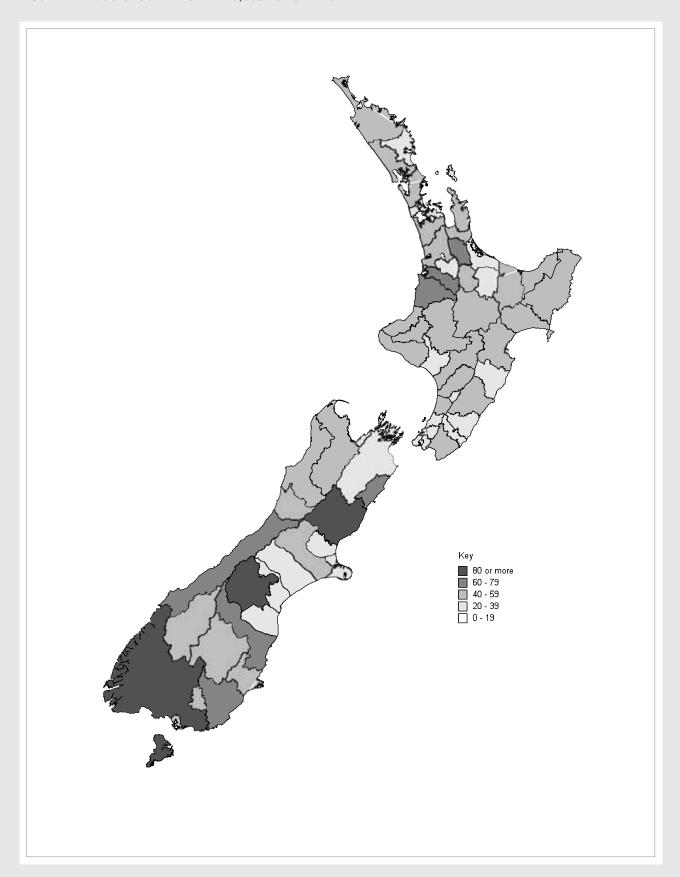
District			ber of crash rash happer			2008 Casualties			
Local body names	2004	2005	2006	2007	2008	Fatal injuries	Serious injuries	Minor injuries	Total Casualties
Ashburton	47	48	45	79	65	7	14	69	90
Buller	36	32	39	55	37	2	12	43	57
Carterton	17	22	12	35	17	-	4	18	22
Central Hawkes Bay	36	45	36	35	34	-	28	24	52
Central Otago	86	85	74	74	69	6	21	78	105
Chatham Island	5	4	6	5	4	1	-	3	4
Clutha	99	112	119	105	80	4	17	96	117
Far North	224	179	226	245	182	10	51	214	275
Franklin	187	184	212	189	204	9	51	244	304
Gisborne	101	124	114	109	153	8	39	180	227
Gore	48	44	41	29	44	5	10	52	67
Grey	38	34	36	37	44	5	7	48	60
Hastings	263	294	286	273	222	7	65	235	307
Hauraki	88	80	69	83	75	7	16	71	94
Horowhenua	58	85	95	95	98	5	33	100	138
Hurunui	54	64	66	83	66	2	33	63	98
Invercargill	198	212	256	206	193	3	25	242	270
Kaikoura	23	13	25	29	20	2	5	19	26
Kaipara	87	87	95	103	78	4	29	71	104
Kapiti Coast	78	97	96	95	80	1	19	82	102
Kawerau	3	3	6	5	4	1	1	3	5
Mackenzie	16	20	27	23	22	3	5	24	32
Manawatu	101	82	95	95	105	8	43	107	158
Marlborough	107	113	124	135	124	1	32	138	171
Masterton	57	70	74	61	69	1	15	75	91
Matamata-Piako	90	92	91	94	140	16	43	153	212
New Plymouth	167	180	213	229	216	4	46	237	287
Opotiki	35	24	27	27	34	5	11	28	44
Otorohanga	29	37	54	40	46	-	14	45	59
Papakura	127	118	121	141	127	2	25	153	180
Queenstown-Lakes	107	125	105	126	93	3	23	114	140
Rangitikei	43	58	57	59	59	3	16	64	83
Rodney	247	232	263	288	302	9	82	339	430
Rotorua	193	167	178	184	181	6	43	207	256
Ruapehu	64	44	55	67	55	3	9	60	72
Selwyn	67	81	81	99	107	7	29	115	151
South Taranaki	92	80	68	72	74	2	22	101	125
South Waikato	82	74	63	70	72	12	31	67	110
South Wairarapa	41	26	28	37	31	2	9	26	37
Southland	129	184	171	174	163	4	54	181	239
Stratford	16	15	29	37	34	1	9	39	49
Tararua	51	63	64	69	70	3	22	68	93
Tasman	113	107	108	138	139	8	40	152	200
Taupo	98	126	141	150	132	15	43	137	195
Tauranga	144	173	167	179	169	5	37	165	207
Thames Coromandel	57	88	81	88	81	3	20	95	118
Timaru	78	85	104	115	96	4	24	97	125
Waikato	203	192	195	216	188	10	45	207	262
Waimakariri	84	91	81	85	81	4	17	88	109
Waimate	26	19	14	36	24	3	8	18	29
Waipa	117	125	132	121	124	7	33	137	177
Wairoa	34	46	29	47	33	6	10	27	43
Waitaki	103	97	94	94	91	4	22	103	129
Waitomo	53	71	60	65	48	2	8	50	60
Wanganui	81	101	71	93	99	1	21	105	127
Western Bay of Plenty	110	82	108	145	114	6	56	115	177
Westland	26	40	45	31	42	1	20	43	64
Whakatane	85	82	76	97	96	6	28	115	149
Whangarei	210	226	203	195	229	15	51	245	311
Totals	5259	5484	5651	5991	5679	284	1546	6195	8025



**FIGURE 28: 2008 TOTAL CASUALTIES** 



FIGURE 29: 2008 CASUALTIES PER 10,000 POPULATION





# SECTION 8: **DRIVERS INVOLVED IN REPORTED INJURY CRASHES**



TABLE 49: DRIVERS INVOLVED IN FATAL CRASHES BY AGE AND VEHICLE TYPE YEAR ENDING 31 DECEMBER 2008

	Ca	ar/van	Tro	uck	Moto	rcycle	Total		
Age group years	Number	Percent male	Number	Percent male	Number	Percent male	Number	Percent male	
0 to 14	1	100	-	-	-	-	1	100	
15 to 19	55	73	2	100	7	100	65	77	
20 to 24	58	76	3	67	8	63	70	73	
25 to 29	34	77	2	100	7	100	44	82	
30 to 34	23	61	6	100	5	100	35	74	
35 to 39	24	71	6	100	4	100	35	80	
40 to 44	27	63	11	91	4	100	43	74	
45 to 49	25	76	3	100	4	100	33	79	
50 to 54	17	59	9	100	6	100	33	79	
55 to 59	20	60	7	100	3	100	30	73	
60 to 64	19	79	3	100	-	-	24	83	
65 to 69	16	63	1	100	3	100	20	70	
70 and over	24	67	-	-	2	100	27	70	
Unknown	13	46	2	100	-	-	16	50	
TOTAL	356	69	55	96	53	94	476	75	

 $\textbf{NOTE:} \ \ Columns \ do \ not \ always \ add \ to \ the \ total \ as \ there \ are \ other \ vehicle \ types \ such \ as \ buses \ not \ included \ separately \ in \ the \ table.$ 

TABLE 50: DRIVERS INVOLVED IN INJURY CRASHES BY AGE AND VEHICLE TYPE YEAR ENDING 31 DECEMBER 2008

	Car	/van	Tru	ıck	Moto	rcycle	То	tal
Age group years	Number	Percent male	Number	Percent male	Number	Percent male	Number	Percent male
0 to 14	25	72	1	-	19	68	48	69
15 to 19	2313	65	18	100	199	81	2536	66
20 to 24	2251	62	57	95	213	84	2531	64
25 to 29	1524	62	66	99	122	84	1715	65
30 to 34	1311	57	81	93	120	88	1516	61
35 to 39	1323	56	136	94	147	87	1620	62
40 to 44	1281	58	132	96	136	86	1577	64
45 to 49	1157	53	125	98	147	88	1459	61
50 to 54	979	56	86	99	102	85	1199	62
55 to 59	749	56	86	100	67	85	925	63
60 to 64	591	57	52	100	34	91	707	63
65 to 69	402	59	10	100	19	95	445	62
70 and over	896	58	9	100	12	100	926	59
Unknown	800	30	70	31	26	77	912	31
TOTAL	15602	58	929	92	1363	85	18116	62

NOTE: Columns do not always add to the total as there are other vehicle types such as buses not included separately in the table. Fatal crashes are not included in this table (see Table 49).

TABLE 51: CAR AND VAN DRIVERS INVOLVED IN FATAL CRASHES BY AGE GROUP YEAR ENDING 31 DECEMBER

Year	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 to 59 years	60 years and over	Unknown and other	Total
1980	95	132	80	81	88	58	20	554
1981	121	122	78	90	84	68	40	603
1982	112	156	70	105	104	59	21	627
1983	108	156	71	100	109	59	29	632
1984	116	139	84	110	116	56	18	639
1985	119	143	113	128	111	70	29	713
1986	126	154	100	139	127	60	35	741
1987	138	137	118	144	135	65	25	762
1988	110	133	105	119	131	68	19	685
1989	101	119	105	143	146	80	26	720
1990	99	145	105	128	122	59	36	694
1991	94	140	89	119	115	67	15	639
1992	76	119	85	122	120	74	28	624
1993	78	106	70	108	100	72	36	570
1994	64	110	81	117	110	54	21	557
1995	72	100	70	125	130	59	16	572
1996	80	82	70	94	114	60	21	521
1997	69	71	59	104	138	82	29	552
1998	70	84	61	115	115	74	28	547
1999	70	85	69	95	115	88	19	541
2000	56	64	42	94	128	87	21	492
2001	60	68	57	72	115	77	23	472
2002	44	55	54	79	108	69	18	427
2003	71	71	63	106	120	68	14	513
2004	76	62	38	78	114	70	14	452
2005	73	59	38	66	105	56	9	406
2006	59	57	31	74	110	76	7	413
2007	61	62	33	84	111	74	19	444
2008	55	58	34	47	89	59	14	356

TABLE 52: CAR AND VAN DRIVERS INVOLVED IN INJURY CRASHES BY AGE GROUP YEAR ENDING 31 DECEMBER

Year	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 to 59 years	60 years and over	Unknown and other	Total
1980	2474	2306	1343	1953	2145	998	335	11554
1981	2266	2378	1401	1890	2075	1032	417	11459
1982	2376	2619	1443	1999	2237	1068	374	12116
1983	2431	2616	1533	2145	2307	1292	373	12697
1984	2578	2908	1708	2423	2583	1326	413	13939
1985	2750	3201	1966	2677	2906	1382	440	15322
1986	2926	3113	1986	2748	2881	1431	429	15514
1987	2840	2938	2145	2785	2824	1415	431	15378
1988	2284	2766	2126	2826	2963	1452	442	14859
1989	2202	2777	2037	2725	3032	1456	465	14694
1990	2445	2947	2262	3041	3194	1611	449	15949
1991	2306	2756	2109	3184	3244	1582	350	15531
1992	2127	2813	1968	2995	3174	1502	329	14908
1993	2034	2525	1880	2825	3060	1485	345	14154
1994	2302	2713	1995	3136	3259	1607	412	15424
1995	2380	2930	1988	3299	3480	1565	362	16004
1996	2008	2298	1691	2745	3113	1427	380	13662
1997	1878	1896	1541	2539	2787	1212	400	12253
1998	1729	1743	1423	2309	2645	1168	442	11459
1999	1624	1578	1336	2347	2714	1169	454	11222
2000	1417	1496	1166	2089	2507	1072	408	10155
2001	1669	1675	1237	2366	2987	1292	441	11667
2002	2133	1949	1432	2660	3481	1527	691	13873
2003	2146	2163	1348	2802	3743	1623	704	14529
2004	2168	2026	1382	2710	3639	1617	642	14184
2005	2285	2185	1431	2693	3952	1607	754	14907
2006	2397	2271	1501	2678	4041	1770	609	15267
2007	2542	2386	1610	2910	4328	1855	830	16461
2008	2313	2251	1524	2634	4166	1889	825	15602

**NOTE:** Fatal crashes are not included in this table. (see Table 51).



FIGURE 30: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS BY AGE AND SEX FOR FATAL CRASHES

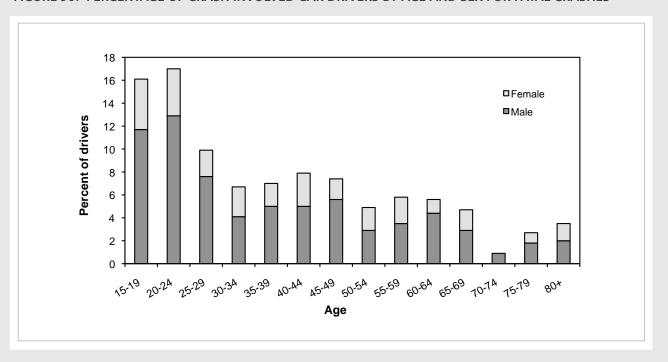


FIGURE 31: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS BY AGE AND SEX FOR INJURY CRASHES

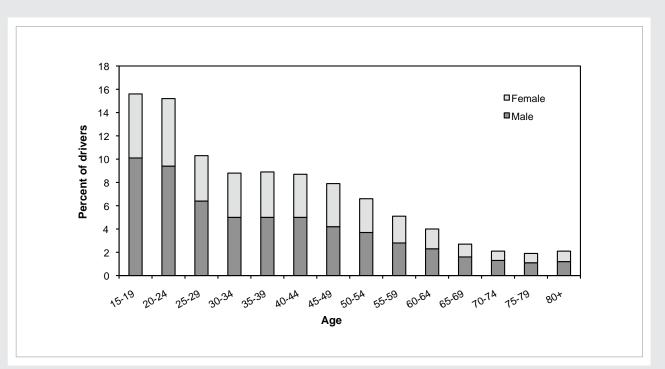


FIGURE 32: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS IN SELECTED AGE GROUPS - FATAL CRASHES

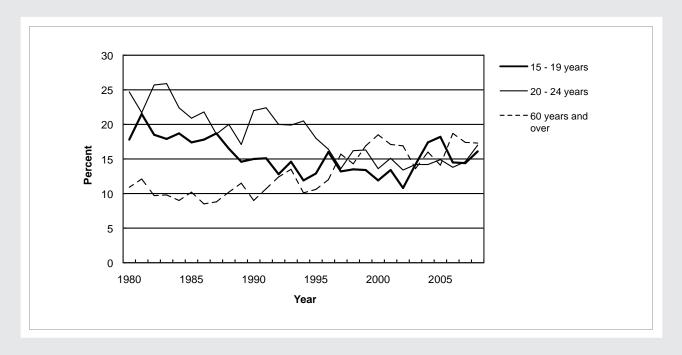


FIGURE 33: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS IN SELECTED AGE GROUPS - INJURY CRASHES

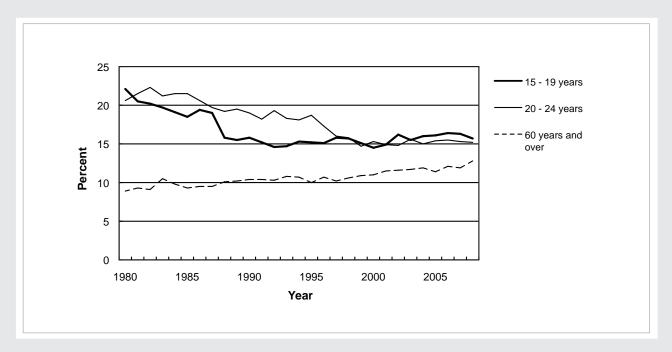


TABLE 53: CAR AND VAN DRIVERS INVOLVED IN FATAL CRASHES BY AGE GROUP AND SEX YEAR ENDING 31 DECEMBER

Year	15 to 19 years	Percent male	30 to 59 years	Percent male	60 years and over	Percent male	Total	Percent Male
1980	307	83	169	80	58	74	554	81
1981	321	82	174	75	68	72	603	77
1982	338	84	209	83	59	75	627	82
1983	335	84	209	78	59	71	632	80
1984	339	81	226	74	56	82	639	78
1985	375	78	239	73	70	81	713	76
1986	380	80	266	78	60	78	741	78
1987	393	77	279	74	65	63	762	74
1988	348	81	250	75	68	66	685	77
1989	325	80	289	74	80	70	720	76
1990	349	77	250	76	59	73	694	76
1991	323	73	234	76	67	73	639	74
1992	280	78	242	74	74	66	624	74
1993	254	82	208	76	72	67	570	77
1994	255	77	227	72	54	74	557	75
1995	242	75	255	69	59	68	572	71
1996	232	77	208	71	60	73	521	74
1997	199	67	242	75	82	76	552	72
1998	215	76	230	67	74	69	547	71
1999	224	71	210	74	88	67	541	71
2000	162	72	222	72	87	66	492	70
2001	185	82	187	70	77	61	472	74
2002	153	71	187	65	69	71	427	67
2003	205	76	226	70	68	72	513	72
2004	176	73	192	68	70	71	452	70
2005	170	80	171	70	56	79	406	76
2006	147	65	184	69	76	71	413	67
2007	156	70	195	71	74	66	444	69
2008	147	75	136	65	59	70	356	69

TABLE 54 CAR AND VAN DRIVERS INVOLVED IN INJURY CRASHES BY AGE GROUP AND SEX YEAR ENDING 31 DECEMBER

Year	15 to 19 years	Percent male	30 to 59 years	Percent male	60 years and over	Percent male	Total	Percent Male
1980	6123	76	4098	69	998	69	11554	72
1981	6045	76	3965	70	1032	70	11459	72
1982	6438	74	4236	66	1068	69	12116	70
1983	6580	73	4452	68	1292	69	12697	69
1984	7194	72	5006	68	1326	68	13939	69
1985	7917	73	5583	66	1382	67	15322	69
1986	8025	73	5629	66	1431	69	15514	69
1987	7923	70	5609	64	1415	65	15378	66
1988	7176	69	5789	64	1452	64	14859	66
1989	7016	70	5757	63	1456	66	14694	66
1990	7654	69	6235	62	1611	65	15949	65
1991	7171	68	6428	62	1582	65	15531	65
1992	6908	67	6169	62	1502	65	14908	64
1993	6439	65	5885	61	1485	61	14154	62
1994	7010	65	6395	60	1607	65	15424	62
1995	7298	66	6779	61	1565	63	16004	63
1996	5997	65	5858	60	1427	63	13662	62
1997	5315	65	5326	60	1212	62	12253	61
1998	4895	65	4954	59	1168	61	11459	60
1999	4538	65	5061	58	1169	60	11222	60
2000	4079	65	4596	59	1072	62	10155	61
2001	4581	65	5353	57	1292	58	11667	59
2002	5514	64	6141	58	1527	60	13873	59
2003	5657	64	6545	57	1623	59	14529	59
2004	5576	64	6349	58	1617	60	14184	59
2005	5901	64	6645	57	1607	61	14907	59
2006	6169	63	6719	59	1770	58	15267	59
2007	6538	62	7238	57	1855	61	16461	58
2008	6088	63	6800	56	1889	58	15602	58

NOTE: Fatal crashes are not included in this table (see table 53).

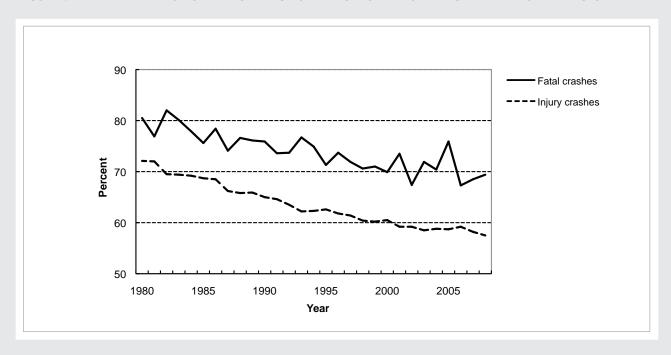
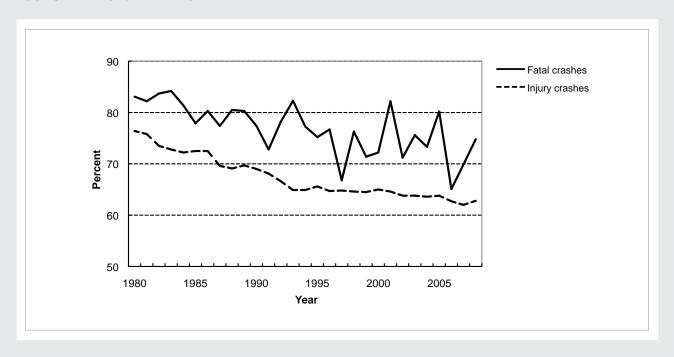


FIGURE 35: MALE DRIVERS AS A PERCENTAGE OF ALL CRASH INVOLVED CAR DRIVERS - YOUNG DRIVERS 15-29 YEARS



		Fatal (	Crashes		Injury Crashe			Crashes	S	
Age group years	Car/van	Truck	Motorcycle	Total		Car/van	Truck	Motorcycle	Total	
15 to 19	27	-	-	25		16	-	7	15	
20 to 24	43	-	-	43		14	4	8	13	
25 to 29	44	-	-	41		12	6	10	12	
30 to 39	40	-	-	33		10	2	8	9	
40 to 59	17	3	-	12		6	2	6	6	
60 and over	9	-	-	7		2	1	2	2	
Total	28	2	25	24		10	2	7	9	

 $\mbox{{\bf NOTE}}:$  Where the number of drivers is less than 20 the percentage is not calculated.

TABLE 56: PERCENTAGE OF CRASH INVOLVED DRIVERS WITH TOO FAST FOR CONDITIONS RECORDED AS A FACTOR CONTRIBUTING TO THE CRASH YEAR ENDING 31 DECEMBER 2008

		Fatal (	Crashes			Injury Crashes				
Age group years	Car/van	Truck	Motorcycle	Total		Car/van	Truck	Motorcycle	Total	
15 to 19	42	-	-	40		22	-	9	21	
20 to 24	41	-	-	36		15	14	10	14	
25 to 29	32	-	-	34		12	9	9	12	
30 to 39	26	-	-	24		8	5	13	8	
40 to 59	15	3	-	14		4	7	8	5	
60 and over	3	-	-	4		3	3	6	3	
Total	25	6	32	23		10	7	10	10	

**NOTE**: Where the number of drivers is less than 20 the percentage is not calculated.

TABLE 57: PERCENTAGE OF CRASH INVOLVED DRIVERS WITH FAILED TO GIVE WAY OR STOP RECORDED AS A FACTOR CONTRIBUTING TO THE CRASH YEAR ENDING 31 DECEMBER 2008

		Fatal Crashes				Injury Crashes				
Age group years	Car/van	Truck	Motorcycle	Total		Car/van	Truck	Motorcycle	Total	
15 to 19	2	-	-	5		13	-	5	13	
20 to 24	2	-	-	3		16	7	4	14	
25 to 29	6	-	-	5		15	6	2	13	
30 to 39	4	-	-	3		15	7	4	13	
40 to 59	11	10	-	9		16	6	1	14	
60 and over	19	-	-	17		27	18	9	26	
Total	8	6	4	7		17	8	3	15	

 $\label{eq:NOTE:Where the number of drivers is less than 20 the percentage is not calculated.}$ 

## **SECTION 9: ETHNICITY**



#### TABLE 58: DRIVERS INVOLVED IN CRASHES BY ETHNIC GROUP AND CRASH SEVERITY

YEAR ENDING 31 DECEMBER 2008

	Fa	tal	Serious	s injury	Minor	injury	Total		
Ethnic group	Number	% of known	Number	% of known	Number	% of known	Number	% of known	
Asian	19	4	129	5	1108	8	1256	8	
European	292	68	1940	72	9346	69	11578	70	
Maori	104	24	459	17	1824	14	2387	14	
Pacific	12	3	120	4	873	6	1005	6	
Other	4	1	59	2	344	3	407	2	
SUBTOTAL (known ethnicity)	431	100	2707	100	13495	100	16633	100	
Unknown	45	-	326	-	1588	-	1959	-	
TOTAL	476	-	3033	-	15083	-	18592	-	

NOTE: The Traffic Crash Report form was modified during 2001 to allow the Police to record ethnicity data for those involved in road crashes. The new form was introduced progressively during the year so the first full year of ethnicity data is 2002.

The percentages in the table show each ethnic group as a percentage of drivers of known ethnicity.

TABLE 59: CASUALTIES FROM CRASHES BY ETHNIC GROUP AND CRASH SEVERITY

YEAR ENDING 31 DECEMBER 2008

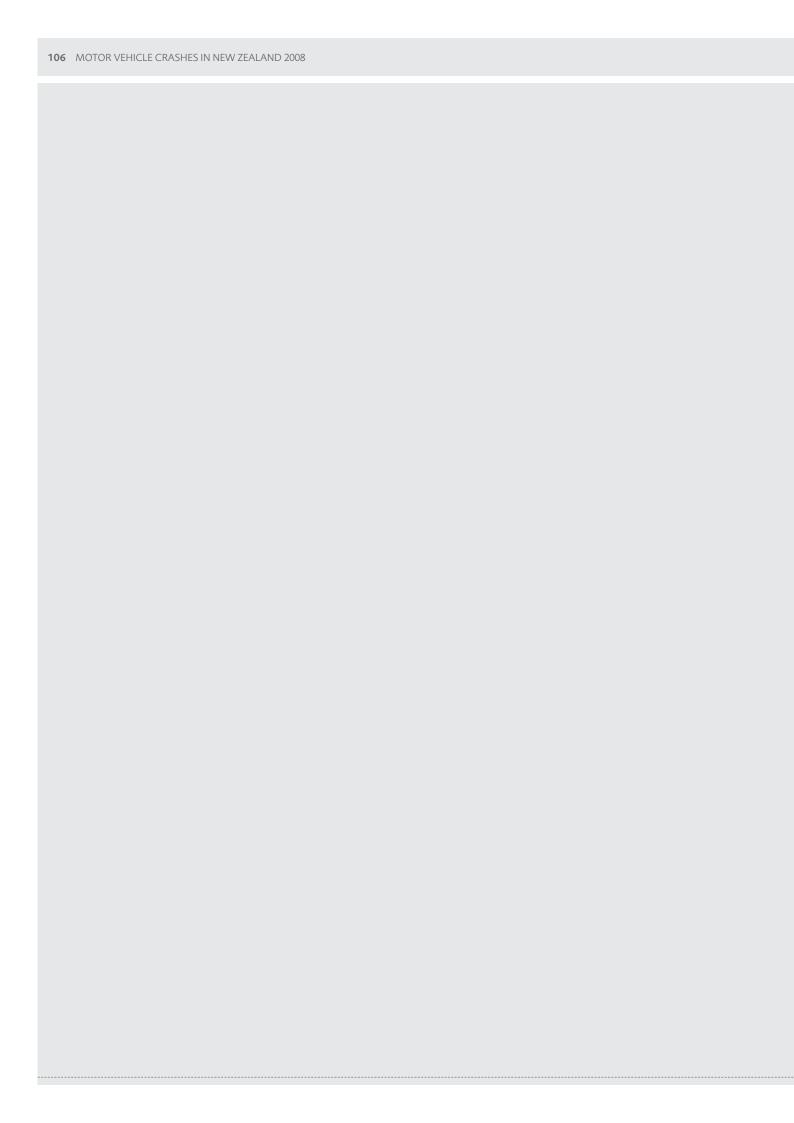
	Fa	tal	Serious	s injury	Minor	injury	Total		
Ethnic group	Number	% of known	Number	% of known	Number	% of known	Number	% of known	
Asian	22	6	109	5	849	7	980	7	
European	212	62	1606	70	7838	68	9656	69	
Maori	94	28	437	19	1850	16	2381	17	
Pacific	9	3	91	4	659	6	759	5	
Other	3	1	56	2	254	2	313	2	
SUBTOTAL (known ethnicity)	340	100	2299	100	11450	100	14089	100	
Unknown	26	-	232	-	1193	-	1451	-	
TOTAL	366	-	2531	-	12643	-	15540	-	

NOTE: The Traffic Crash Report form was modified during 2001 to allow the Police to record ethnicity data for those involved in road crashes. The new form was introduced progressively during the year so the first full year of ethnicity data is 2002.

The percentages in the table show each ethnic group as a percentage of casualties of known ethnicity.

## NATIONAL HEALTH STATISTICS FOR ROAD USERS





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### **NOTES**

- 1. The material presented in this section is derived from data provided by the New Zealand Health Information Service, Ministry of Health.
- 2. The data includes those who, as a result of a motor vehicle crash, were injured seriously enough to be admitted to hospital. (Figures 8 and 9 show data for cyclists who were injured in non-motor vehicle crashes. These casualties are not included in the Ministry of Transport's data base which records primarily motor vehicle crashes.) The data base includes only those discharged during the 2008 calendar year.
- 3. Casualties who are readmitted for further treatment are included only once in the casualty count, but their total stay in hospital is recorded.

FIGURE 1: DEATHS FROM MOTOR VEHICLE CRASHES AS A PERCENTAGE OF ALL DEATHS FOR SELECTED AGE GROUP - 2005

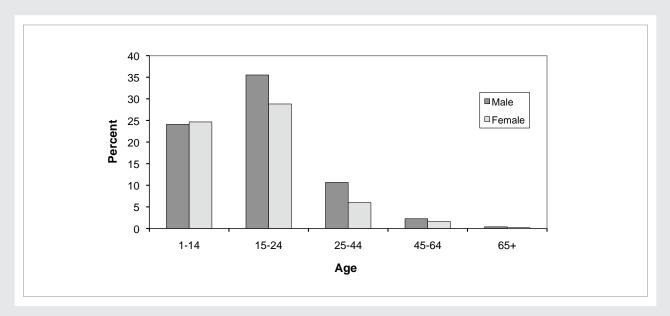


FIGURE 2: HOSPITAL DISCHARGES FROM MOTOR VEHICLE CRASHES (BY LENGTH OF STAY IN HOSPITAL)

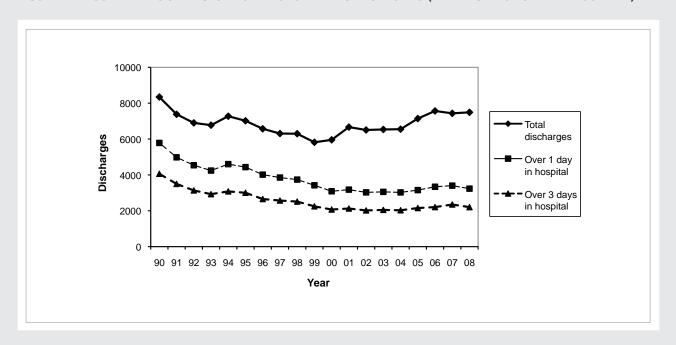


FIGURE 3: HOSPITAL DISCHARGES FROM MOTOR VEHICLE CRASHES (RE-ADMISSIONS NOT INCLUDED)

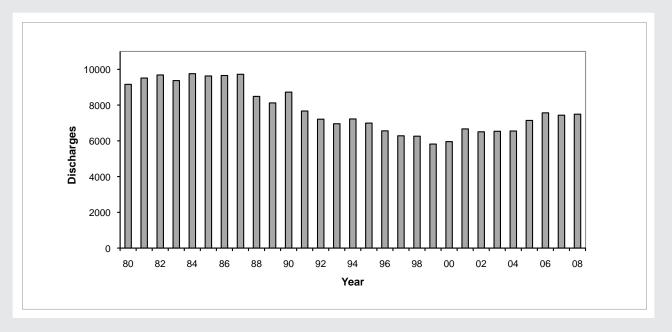


FIGURE 4: TOTAL DAYS STAY IN HOSPITAL RESULTING FROM MOTOR VEHICLE CRASHES

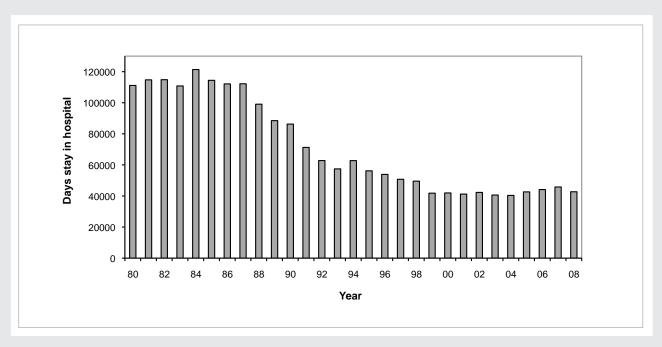


TABLE 1: AGE AND TYPES OF ROAD USERS HOSPITALISED YEAR ENDING 31 DECEMBER 2008

Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	96	-	4	0	34	21	155
5 to 9	-	98	11	2	13	54	16	194
10 to 14	7	108	37	5	39	63	23	282
15 to 19	449	416	160	12	34	104	99	1274
20 to 24	408	231	161	6	23	84	83	996
25 to 29	266	115	123	5	22	43	56	630
30 to 34	230	92	107	5	20	39	44	537
35 to 39	208	75	119	7	21	33	54	517
40 to 44	227	57	146	4	38	38	31	541
45 to 49	205	62	130	7	36	43	44	527
50 to 54	176	32	103	8	21	36	26	402
55 to 59	145	44	62	4	15	22	41	333
60 to 64	103	39	29	1	16	22	26	236
65 to 69	79	26	24	1	5	26	32	193
70 to 74	70	33	13	-	4	23	30	173
75 to 79	75	30	6	-	3	28	45	187
80 and over	116	44	6	-	4	47	96	313
TOTALS	2764	1598	1237	71	314	739	767	7490

NOTE: (1) Includes unknown SOURCE: NZHIS Ministry of Health.

FIGURE 5: NUMBER OF HOSPITALISATIONS FROM ROAD CRASHES BY AGE AND SEX

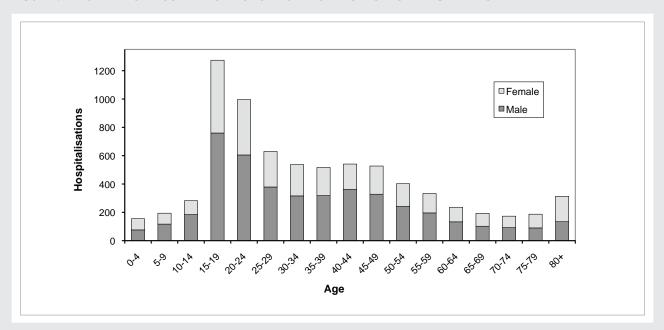
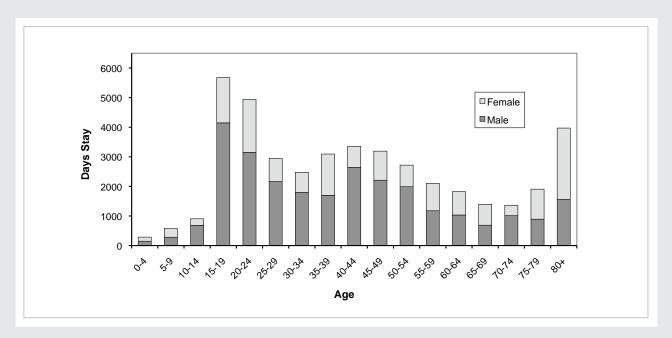


TABLE 2: NUMBER OF DAYS STAY BY AGE AND TYPE OF ROAD USER HOSPITALISED YEAR ENDING 31 DECEMBER 2008

Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	140	-	3	0	121	21	285
5 to 9	-	189	28	62	24	262	11	576
10 to 14	10	359	90	90	107	209	39	904
15 to 19	1955	1815	844	16	155	446	446	5677
20 to 24	1958	1335	742	42	260	304	299	4940
25 to 29	1055	741	704	8	58	169	211	2946
30 to 34	1020	505	458	47	80	148	216	2474
35 to 39	983	964	799	25	29	104	189	3093
40 to 44	1066	558	1073	63	104	326	165	3355
45 to 49	768	331	1206	124	161	310	291	3191
50 to 54	871	206	1092	41	125	202	181	2718
55 to 59	800	287	536	5	64	133	277	2102
60 to 64	858	300	335	3	48	113	168	1825
65 to 69	365	323	145	6	58	220	277	1394
70 to 74	501	181	300	-	30	238	113	1363
75 to 79	426	279	196	-	66	299	640	1906
80 and over	1159	591	23	-	113	619	1466	3971
TOTALS	13795	9104	8571	535	1482	4223	5010	42720

NOTE: (1) Includes unknown SOURCE: NZHIS Ministry of Health.

FIGURE 6: TOTAL DAYS STAY IN HOSPITAL FROM ROAD CRASHES BY AGE AND SEX





Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	1	-	-	-	4	1	2
5 to 9	-	2	-	-	-	5	-	3
10 to 14	-	3	2	-	3	3	2	3
15 to 19	4	4	5	-	5	4	5	4
20 to 24	5	6	5	-	11	4	4	5
25 to 29	4	6	6	-	3	4	4	5
30 to 34	4	5	4	-	-	4	5	5
35 to 39	5	13	7	-	1	3	4	6
40 to 44	5	10	7	-	3	9	5	6
45 to 49	4	5	9	-	4	7	7	6
50 to 54	5	6	11	-	6	6	7	7
55 to 59	6	7	9	-	-	6	7	6
60 to 64	8	8	12	-	-	5	6	8
65 to 69	5	12	6	-	-	8	9	7
70 to 74	7	5	-	-	-	10	4	8
75 to 79	6	9	-	-	-	11	14	10
80 and over	10	13	-	-	-	13	15	13
TOTALS	5	6	7	8	5	6	7	6

NOTE: (1) Includes unknown Average days stay are not calculated when there are fewer than 20 individuals SOURCE: NZHIS Ministry of Health.

FIGURE 7: HOSPITALISATIONS AND DAYS STAY BY ROAD USER TYPE

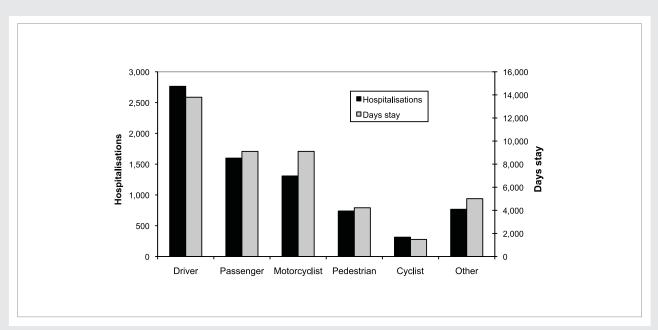


FIGURE 8: NUMBER OF PEDAL CYCLISTS HOSPITALISED FROM NON-MOTOR VEHICLE CRASHES

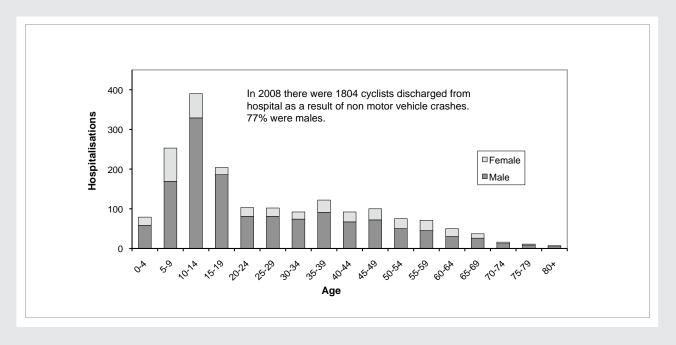
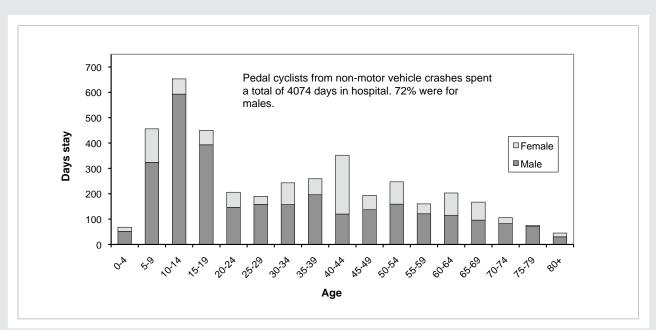
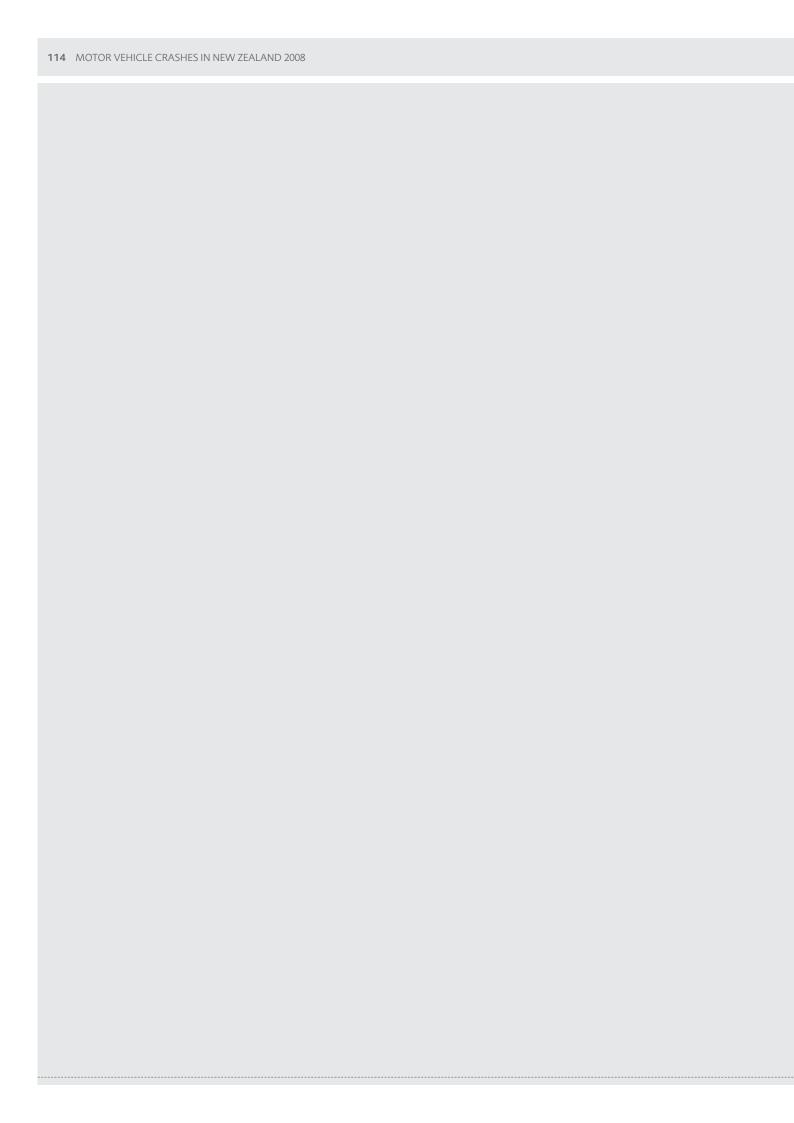


FIGURE 9: DAYS STAY IN HOSPITAL FOR PEDAL CYCLISTS INJURED IN NON-MOTOR VEHICLE CRASHES

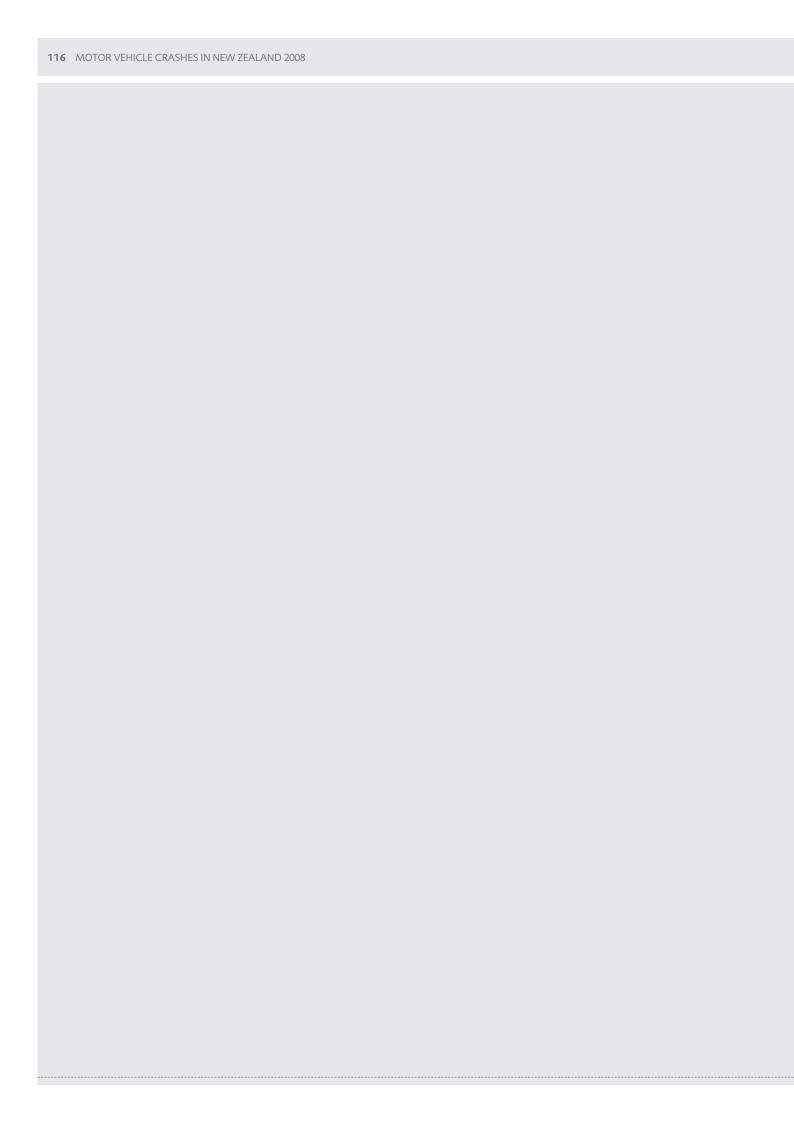






# BREATH AND BLOOD ALCOHOL STATISTICS





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### **NOTES**

### 1. Data

The data in this section includes alcohol offences recorded by Police. There can be several alcohol offence codes related to a single incident. For the following tables and graphs 'Offenders' are counted only once for each incident. Any offence records for the same individual that occur within the same hour are treated as a single incident. Not all the offences reported here will result in a successful prosecution.

# 2. Limits and Testing procedure

As from December 1988 the legal breath alcohol level was lowered from 500 micrograms of alcohol per litre of breath to 400 micrograms of alcohol per litre of breath.

From 1 April 1993, for those aged under 20 years, the legal breath alcohol limit was lowered to 150 micrograms of alcohol per litre of breath and the legal blood alcohol level was reduced to 30mg of alcohol per 100ml of blood.

### The procedure is:

- i. A breath screening test is requested.
- ii. If the screening test is positive or not taken for any reason the driver is asked to accompany the officer to a place where an evidential breath or blood test may be taken.
- iii. If the evidential breath test -
  - (a) is not taken for any reason, then a blood sample is requested by the officer.
  - (b) gives a reading of not over 400 micrograms of alcohol per litre of breath (150 for those under 20 years), then the test is considered negative and no blood sample is requested.
  - (c) gives a reading of over 400 (150 for those under 20 years), then the driver, after being advised of his rights, decides whether to accept the reading and subsequent court action or to request a blood sample.

Refusing a blood sample when requested by an officer, or a result over the legal limit normally results in court charges.

FIGURE 1: NUMBER OF ALCOHOL OFFENDERS BY AGE GROUP AND SEX

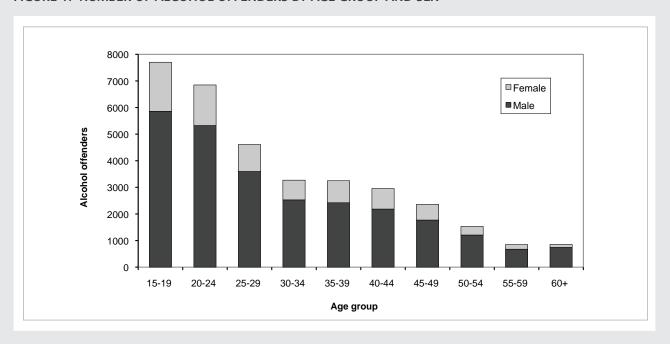


TABLE 1: NUMBER OF ALCOHOL OFFENDERS BY AGE AND SEX YEAR ENDING 31 DECEMBER

	20	06	20	07	20	08
Age group	Male	Female	Male	Female	Male	Female
15 to 19	5018	1538	5518	1710	5859	1844
20 to 24	4097	1037	4640	1256	5323	1526
25 to 29	2678	691	3115	839	3595	1016
30 to 34	2205	723	2437	717	2529	741
35 to 39	2048	654	2276	739	2421	827
40 to 44	1873	567	2006	709	2184	772
45 to 49	1330	446	1611	546	1771	588
50 to 54	903	219	1023	268	1208	323
55 to 59	566	131	635	145	675	174
60 and over	528	93	660	82	741	112
Unknown age	33	16	24	12	33	10
Total	21279	6115	23945	7023	26339	7933

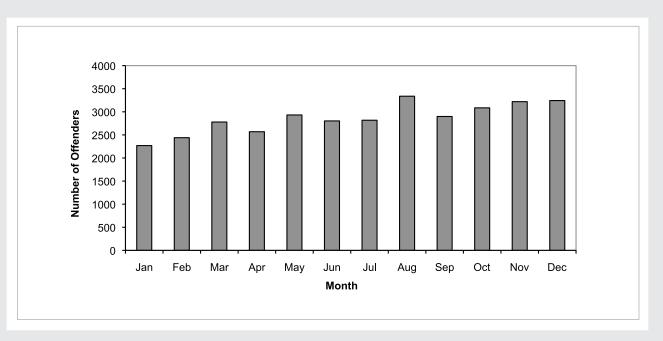
NOTE: In 2008 there were 125 cases where sex was not recorded.



TABLE 2: ALCOHOL OFFENDERS BY MONTH AND CRASH INVOLVEMENT YEAR ENDING 31 DECEMBER 2008

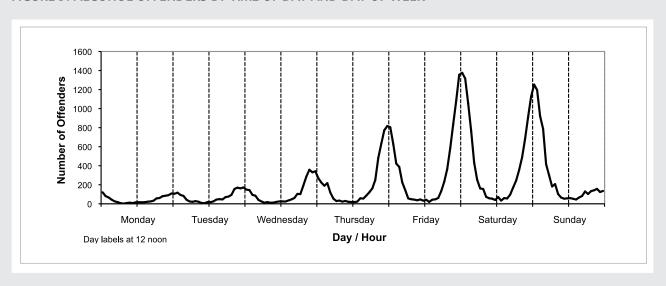
Month	Fatal crash	Injury crash	Non-injury crash	Did not crash	Total
January	1	48	114	2106	2269
February	1	70	140	2229	2440
March	3	56	155	2565	2779
April	0	62	166	2341	2569
May	1	63	175	2693	2932
June	0	60	159	2584	2803
July	0	48	186	2584	2818
August	0	83	178	3077	3338
September	4	57	148	2690	2899
October	1	63	184	2838	3086
November	3	64	204	2949	3220
December	2	68	194	2980	3244
Total	16	742	2003	31636	34397

FIGURE 2: NUMBER OF ALCOHOL OFFENDERS BY MONTH OF THE YEAR



Time of Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	121	106	149	268	804	1376	1253	4077
1am to 1.59am	81	117	144	223	627	1316	1195	3703
2am to 2.59am	67	93	94	190	422	1053	920	2839
3am to 3.59am	44	83	85	217	387	763	787	2366
4am to 4.59am	26	43	41	118	225	430	416	1299
5am to 5.59am	18	25	25	55	143	252	299	817
6am to 6.59am	7	21	11	29	56	161	182	467
7am to 7.59am	2	28	18	34	48	156	207	493
8am to 8.59am	8	22	11	23	44	73	103	284
9am to 9.59am	12	9	13	30	37	58	66	225
10am to 10.59am	8	6	20	21	46	54	54	209
11am to 11.59am	15	18	25	19	33	40	57	207
noon to 12.59am	17	17	25	18	42	71	60	250
1pm to 1.59pm	16	26	24	23	20	34	53	196
2pm to 2.59pm	17	45	35	58	43	60	45	303
3pm to 3.59pm	22	49	46	55	47	56	66	341
4pm to 4.59pm	25	46	61	86	61	96	82	457
5pm to 5.59pm	33	70	104	121	133	171	130	762
6pm to 6.59pm	57	76	102	161	231	244	103	974
7pm to 7.59pm	61	94	193	251	365	355	133	1452
8pm to 8.59pm	80	156	287	483	583	490	142	2221
9pm to 9.59pm	85	170	358	631	836	685	157	2922
10pm to 10.59pm	91	162	331	773	1083	913	124	3477
11pm to 11.59pm	109	172	342	817	1355	1126	135	4056
TOTALS	1022	1654	2544	4704	7671	10033	6769	34397

FIGURE 3: ALCOHOL OFFENDERS BY TIME OF DAY AND DAY OF WEEK





# TABLE 4: ALCOHOL OFFENDERS BY ROAD TYPE AND WEEKEND/NON-WEEKEND

YEAR ENDING 31 DECEMBER 2008

		Weekday	Weekend	Total
Open road		·	·	
	State Highway	735	1311	2046
	Non-State Highway	456	699	1155
	Open Road Subtotal	1191	2010	3201
Urban				
	State Highway	677	1179	1856
	Non-State Highway	7141	12326	19467
	Urban Subtotal	7818	13505	21323
Speed limit unspecified		3776	6097	9873
Total		12785	21612	34397

TABLE 5: ALCOHOL LEVEL BY DRIVER AGE YEAR ENDING 31 DECEMBER 2008

						Alc	ohol level	(1)						
Age group	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	18	68	1301	2519	749	1105	1072	751	92	12	6	8	7	7708
20 to 24	26	154	0	7	979	1718	2053	1600	264	24	4	1	30	6860
25 to 29	28	155	0	1	578	1033	1292	1210	266	34	5	1	22	4625
30 to 34	22	135	0	2	360	708	882	883	239	30	9	3	18	3291
35 to 39	17	146	0	2	331	644	886	876	286	59	8	2	6	3263
40 to 44	23	161	0	2	303	588	766	815	225	52	16	1	11	2963
45 to 49	13	135	0	0	227	506	592	625	189	55	6	2	10	2360
50 to 54	5	85	0	0	185	324	410	375	125	30	3	3	8	1553
55 to 59	7	34	0	1	116	180	212	218	76	14	1	2	1	862
60 and over	3	31	0	0	120	246	209	181	53	19	4	0	3	869
Unknown age	1	0	6	4	10	7	5	9	1	0	0	0	0	43
Total	163	1104	1307	2538	3958	7059	8379	7543	1816	329	62	23	116	34397

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood. Breath test results have been converted to a blood equivalent eg breath reading of 400 micrograms per litre is equivalent to a blood reading of 80 milligrams per 100 millilitres.

FIGURE 4: NUMBER OF OFFENDERS BY ALCOHOL LEVEL AND AGE

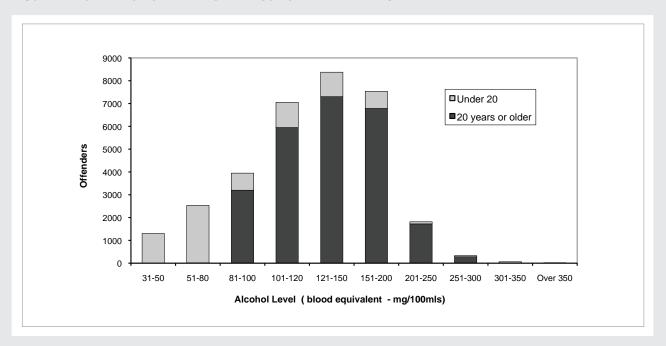


FIGURE 5: NUMBER OF OFFENDERS BY ALCOHOL LEVEL AND SEX

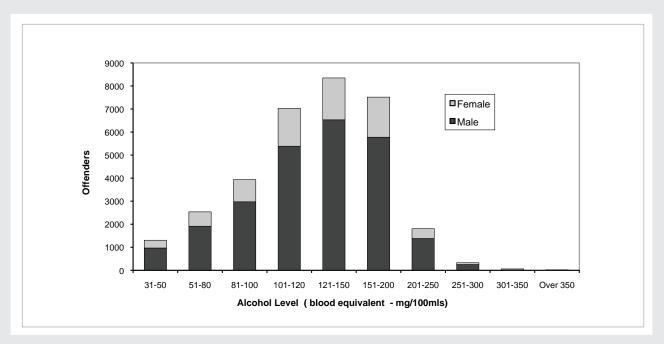


TABLE 6: AGE OF MALE OFFENDERS BY BREATH TEST RESULT YEAR ENDING 31 DECEMBER 2008

				Evidenti	al breath test l	evels (1)			
Age group	No value (2)	0 to 150	151 to 300	301 to 400	401 to 500	501 to 600	601 to 1000	Over 1000	Total
15 to 19	761	19	1254	1255	479	778	1256	57	5859
20 to 24	1041	22	0	6	574	1112	2400	168	5323
25 to 29	765	15	0	1	360	661	1628	165	3595
30 to 34	592	14	0	0	218	428	1122	155	2529
35 to 39	564	16	0	1	188	391	1073	188	2421
40 to 44	569	17	0	2	179	346	934	137	2184
45 to 49	474	17	0	0	134	293	730	123	1771
50 to 54	314	9	0	0	115	202	486	82	1208
55 to 59	185	1	0	0	65	111	269	44	675
60 and over	217	7	0	0	82	156	240	39	741
Unknown age	11	0	3	1	7	3	8	0	33
Total	5493	137	1257	1266	2401	4481	10146	1158	26339

NOTE: (1) In micrograms of alcohol per litre of breath. (2) Most will have blood test results - see Table 8.

TABLE 7: AGE OF FEMALE OFFENDERS BY BREATH TEST RESULT YEAR ENDING 31 DECEMBER 2008

				Evidenti	al breath test l	levels (1)			
Age group	No value (2)	0 to 150	151 to 300	301 to 400	401 to 500	501 to 600	601 to 1000	Over 1000	Total
15 to 19	224	4	453	394	163	230	361	15	1844
20 to 24	222	5	0	1	203	370	679	46	1526
25 to 29	172	5	0	0	108	211	461	59	1016
30 to 34	141	4	0	1	68	138	335	54	741
35 to 39	165	5	0	1	67	135	380	74	827
40 to 44	149	7	0	0	71	122	352	71	772
45 to 49	142	3	0	0	43	106	253	41	588
50 to 54	66	1	0	0	40	61	131	24	323
55 to 59	57	1	0	0	18	22	69	7	174
60 and over	35	0	0	0	14	25	35	3	112
Unknown age	1	0	3	1	1	2	2	0	10
Total	1374	35	456	398	796	1422	3058	394	7933

 $\textbf{NOTE:} \ \textbf{(1)} \ \textbf{In micrograms of alcohol per litre of breath.} \ \textbf{(2)} \ \textbf{Most will have blood test results - see Table 9}.$ 

TABLE 8: AGE OF MALE OFFENDERS BY BLOOD ALCOHOL LEVEL YEAR ENDING 31 DECEMBER 2008

						Blood ald	ohol test	levels (1)						
Age group	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	5086	34	203	154	85	71	74	85	23	6	4	4	30	5859
20 to 24	4272	113	0	0	159	190	243	229	51	11	2	0	53	5323
25 to 29	2821	118	0	0	87	135	147	183	50	7	2	1	44	3595
30 to 34	1938	102	0	0	60	107	125	115	47	10	2	1	22	2529
35 to 39	1855	99	0	0	51	86	111	122	55	21	1	0	20	2421
40 to 44	1616	110	0	0	37	89	119	123	44	13	6	0	27	2184
45 to 49	1289	90	0	0	34	87	79	106	44	23	1	0	18	1771
50 to 54	888	60	0	0	21	49	73	61	28	13	0	0	15	1208
55 to 59	492	18	0	1	22	36	36	34	24	7	0	1	4	675
60 and over	520	25	0	0	17	52	51	41	18	9	2	0	6	741
Unknown age	23	0	1	1	1	2	2	2	1	0	0	0	0	33
Total	20800	769	204	156	574	904	1060	1101	385	120	20	7	239	26339

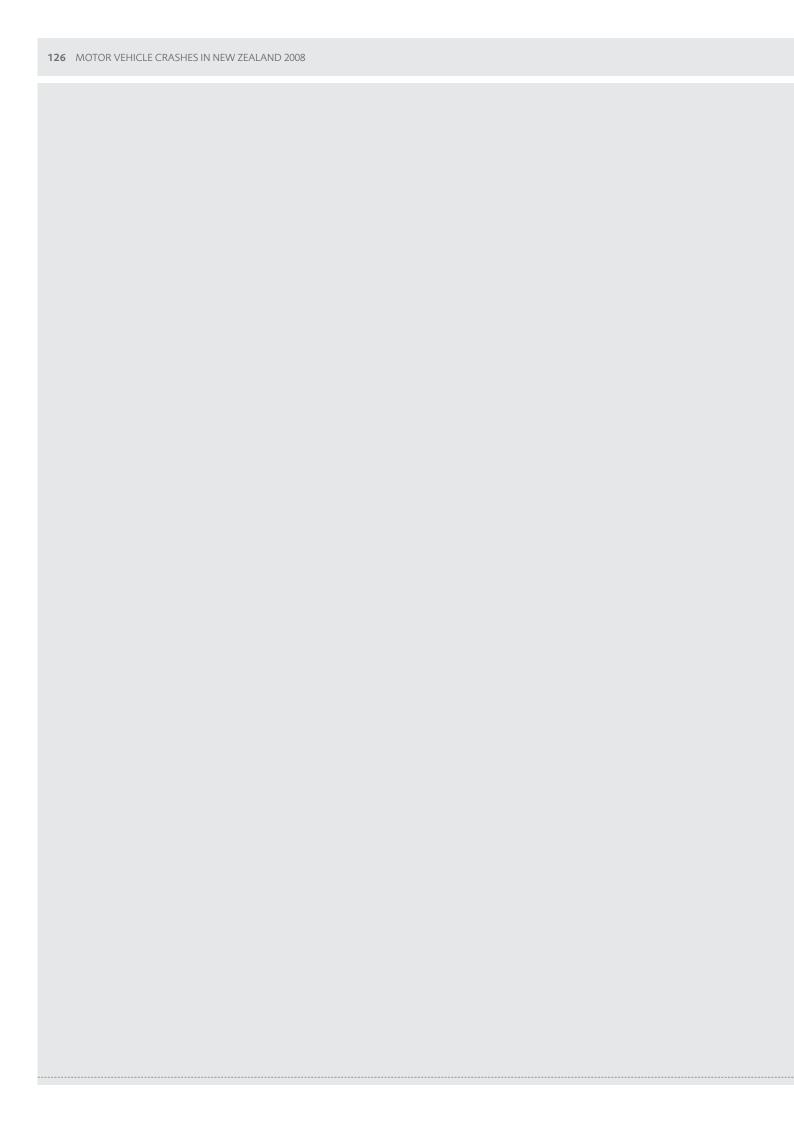
NOTE: (1) In milligrams of alcohol per 100 millilitres of blood. (2) Most will have breath test results - see Table 6.

TABLE 9: AGE OF FEMALE OFFENDERS BY BLOOD ALCOHOL LEVEL YEAR ENDING 31 DECEMBER 2008

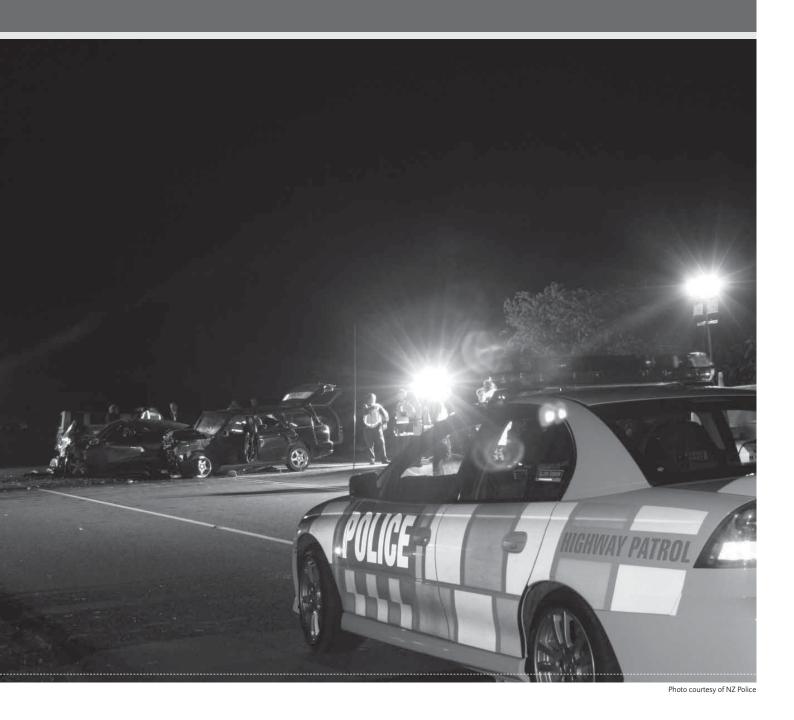
						Blood ald	ohol test	levels (1)						
Age group	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	1617	12	54	51	22	25	23	23	5	1	1	3	7	1844
20 to 24	1306	16	0	0	42	44	47	47	13	2	0	1	8	1526
25 to 29	845	19	0	0	22	23	41	36	15	3	1	0	11	1016
30 to 34	603	17	0	1	10	28	32	28	7	3	1	1	10	741
35 to 39	655	29	0	0	22	29	29	41	11	2	1	1	7	827
40 to 44	621	29	0	0	16	28	21	29	18	4	0	1	5	772
45 to 49	447	29	0	0	16	19	17	32	11	6	1	2	8	588
50 to 54	249	18	0	0	6	6	12	10	10	1	1	1	9	323
55 to 59	119	14	0	0	8	9	10	6	7	1	0	0	0	174
60 and over	77	2	0	0	4	9	6	8	3	2	0	0	1	112
Unknown age	9	0	0	0	1	0	0	0	0	0	0	0	0	10
Total	6548	185	54	52	169	220	238	260	100	25	6	10	66	7933

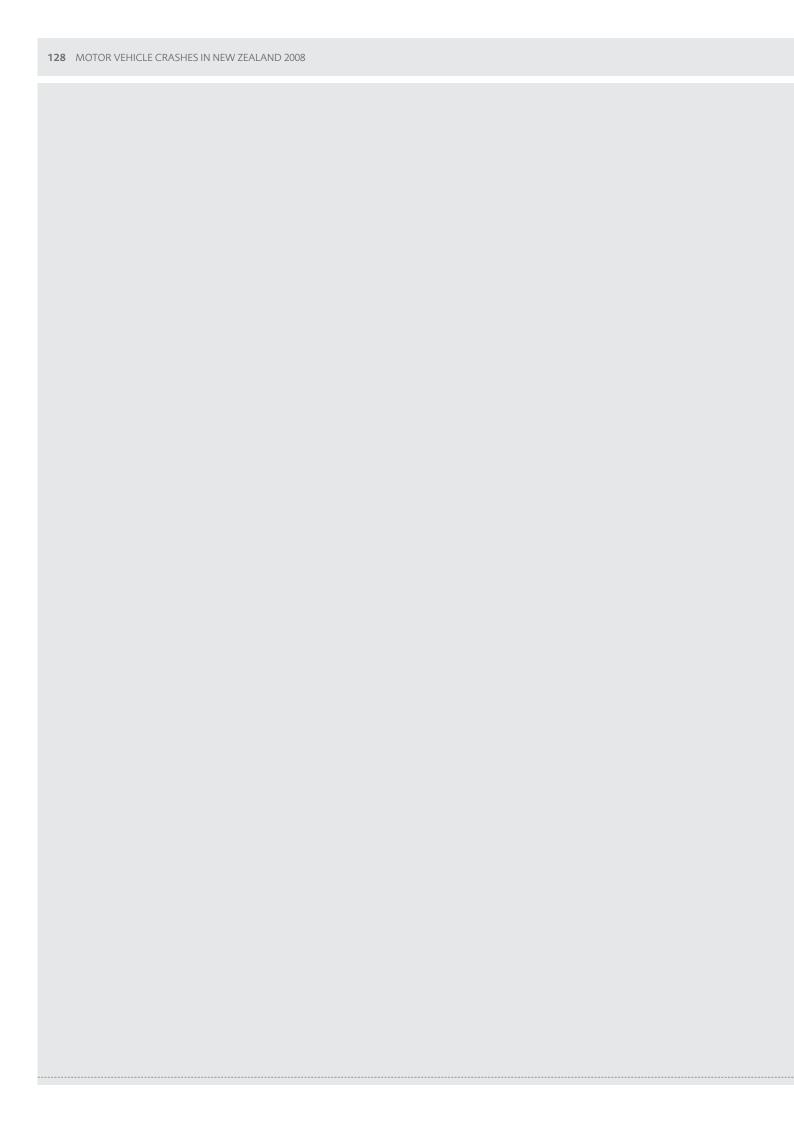
**NOTE:** (1) In milligrams of alcohol per 100 millilitres of blood.(2) Most will have breath test results - see Table 7.





# BLOOD ALCOHOL LEVELS FOR FATALLY INJURED DRIVERS





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# **NOTES**

- 1. The data in this section is derived by matching Ministry of Transport's Traffic Crash Reports with blood alcohol measurements taken as part of post mortem examinations for dead drivers.
- 2. In cases where the driver dies at some time after the crash, the blood alcohol level measured in a post mortem examination may be different to that present at the time of the crash.

### **SUMMARY**

- 1. Of the 211 drivers/riders who were killed in road crashes in 2008, 171 (81 percent) were given a blood test to detect the presence of alcohol.
- 2. Fifty-three drivers had a blood alcohol level above the legal limit. That is, 31 percent of those tested and at least 25 percent of the total number killed were above the legal limit.
- 3. A number of those not tested may also have had a blood alcohol level above the legal limit, so the percentage of killed drivers who were above the legal limit is likely to be higher than 25 percent. An estimate of the number of untested drivers who may have been above the legal limit can be made by assuming that the alcohol involvement rate for untested drivers with 'alcohol suspected' is the same as that for the tested drivers with 'alcohol suspected' and similarly for drivers with 'alcohol not suspected'. For 2008 this estimate gives a further six drivers likely to be above the legal limit. Hence, based on the above assumptions, and the presently available data, a likely estimate is that about 28 percent of all the drivers killed were above the legal blood alcohol limit.

FIGURE 1: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS YEAR ENDED 31 DECEMBER 2008

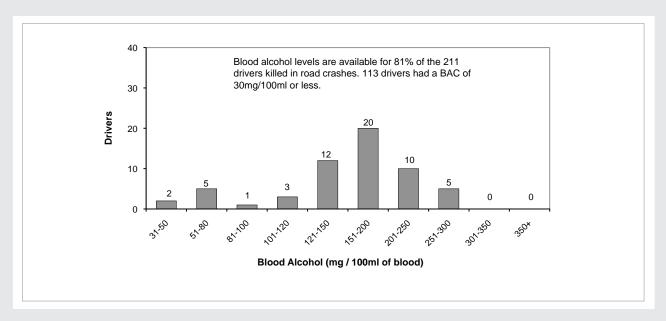


TABLE 1: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY AGE GROUP

						Blood	alcohol le	vels (1)					
Age group	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
15 to 19	6	16	-	2	-	1	1	-	1	-	-	-	27
20 to 24	4	14	-	2	1	2	5	8	2	-	-	-	38
25 to 29	1	13	-	-	-	-	2	5	1	-	-	-	22
30 to 34	3	6	-	-	-	-	1	3	2	3	-	-	18
35 to 39	2	6	-	-	-	-	-	1	1	1	-	-	11
40 to 44	3	12	-	-	-	-	-	1	-	-	-	-	16
45 to 49	2	9	1	-	-	-	1	-	2	-	-	-	15
50 to 54	5	9	1	-	-	-	-	-	-	-	-	-	15
55 to 59	2	6	-	1	-	-	2	1	-	-	-	-	12
60 and over	11	19	-	-	-	-	-	1	-	1	-	-	32
Unknown age	1	3	-	-	-	-	_	-	1	-	-	-	5
Total	40	113	2	5	1	3	12	20	10	5	-	-	211

FIGURE 2: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY AGE GROUP

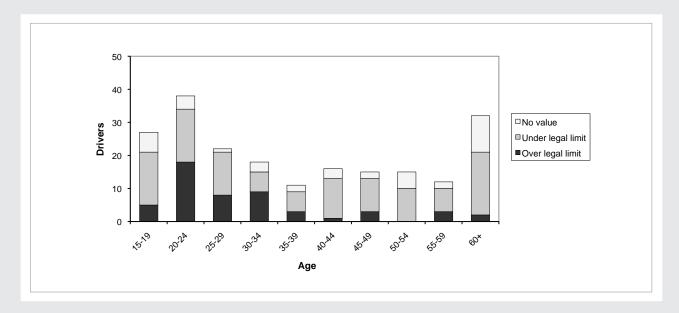




TABLE 2: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TIME OF DAY

YEAR ENDED 31 DECEMBER 2008

						Blood	alcohol le	vels (1)					
Time of day	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Midnight to 12.59am	1	1	1	1	-	-	1	4	1	-	-	-	10
1am to 1.59am	2	1	-	-	-	-	-	2	3	1	-	-	9
2am to 2.59am	-	4	-	-	-	-	1	2	2	-	-	-	9
3am to 3.59am	-	1	-	-	-	1	1	1	-	-	-	-	4
4am to 4.59am	2	1	-	-	-	-	-	-	2	-	-	-	5
5am to 5.59am	2	-	-	-	-	-	-	2	-	-	-	-	4
6am to 6.59am	2	5	-	1	-	-	1	1	-	-	-	-	10
7am to 7.59am	3	3	-	-	-	-	-	-	-	-	-	-	6
8am to 8.59am	1	2	-	-	-	-	-	-	-	-	-	-	3
9am to 9.59am	-	1	-	-	-	-	-	-	-	-	-	-	1
10am to 10.59am	2	4	-	-	-	1	-	-	-	-	-	-	7
11am to 11.59am	2	6	-	-	-	-	-	-	-	-	-	-	8
noon to 12.59am	4	8	-	-	-	-	-	-	-	-	-	-	12
1pm to 1.59pm	2	9	-	-	-	-	-	-	-	2	-	-	13
2pm to 2.59pm	2	14	1	-	-	-	-	-	-	-	-	-	17
3pm to 3.59pm	6	9	-	1	-	-	-	-	-	-	-	-	16
4pm to 4.59pm	1	15	-	-	-	-	-	1	-	-	-	-	17
5pm to 5.59pm	1	8	-	-	-	-	-	-	-	-	-	-	9
6pm to 6.59pm	2	3	-	-	-	-	1	1	-	-	-	-	7
7pm to 7.59pm	2	7	-	-	-	1	1	1	-	-	-	-	12
8pm to 8.59pm	2	3	-	2	1	-	3	1	-	-	-	-	12
9pm to 9.59pm	1	2	-	-	-	-	1	1	-	-	-	-	5
10pm to 10.59pm	-	3	-	-	-	-	-	2	2	1	-	-	8
11pm to 11.59pm	-	3	-	-	-	-	2	1	-	1	-	-	7
	40	113	2	5	1	3	12	20	10	5	_	-	211

FIGURE 3: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY HOUR OF DAY

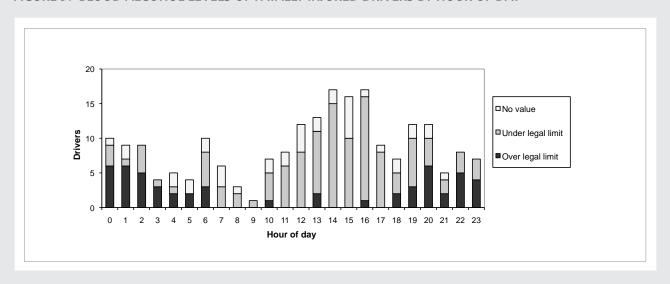
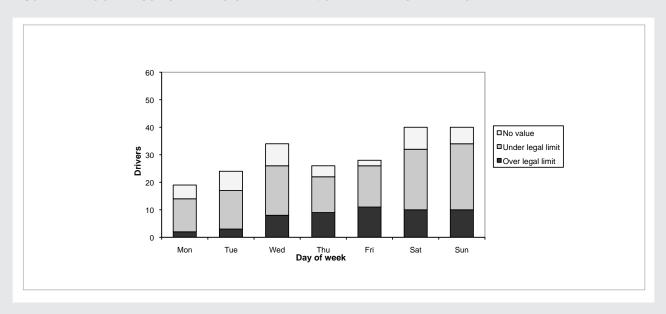


TABLE 3: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY DAY OF WEEK

			Blood alcohol test levels (1)											
Day of week	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total	
Monday	5	12	-	1	-	1	-	-	-	-	-	-	19	
Tuesday	7	13	1	-	-	-	2	1	-	-	-	-	24	
Wednesday	8	17	-	1	-	-	-	3	4	1	-	-	34	
Thursday	4	12	-	1	1	1	1	4	1	1	-	-	26	
Friday	2	15	-	-	-	1	3	6	1	-	-	-	28	
Saturday	8	20	1	2	-	-	3	2	2	2	-	-	40	
Sunday	6	24	-	-	-	-	3	4	2	1	-	-	40	
Total	40	113	2	5	1	3	12	20	10	5	-	-	211	

FIGURE 4: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY DAY OF WEEK



						Blood	Alcohol lev	vels (1)					
Month	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
January	6	6	-	1	-	-	1	2	1	-	-	-	17
February	5	13	-	-	1	-	-	2	-	-	-	-	21
March	2	8	-	-	-	1	3	3	2	-	-	-	19
April	3	11	-	-	-	-	1	1	1	-	-	-	17
May	-	10	-	-	-	-	-	3	3	-	-	-	16
June	2	9	-	1	-	-	3	1	1	-	-	-	17
July	2	5	-	-	-	-	2	3	-	-	-	-	12
August	4	8	-	1	-	1	-	-	-	-	-	-	14
September	1	9	-	-	-	-	1	2	-	-	-	-	13
October	2	7	-	1	-	-	1	-	2	2	-	-	15
November	4	10	-	1	-	-	-	2	-	1	-	-	18
December	9	17	2	-	-	1	-	1	-	2	-	-	32
Total	40	113	2	5	1	3	12	20	10	5	-	-	211

FIGURE 5: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY MONTH

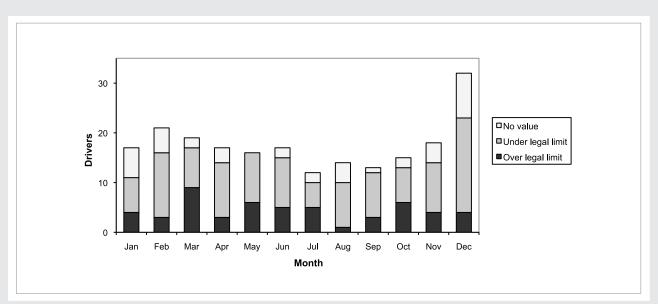


TABLE 5: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF CRASH

		Blood Alcohol levels (1)											
Crash type	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Overtaking	1	4	-	-	-	-	-	-	-	1	-	-	6
Head on collision	7	51	-	1	1	-	3	-	1	1	-	-	65
Lost control straight	10	15	-	1	-	1	3	1	2	1	-	-	34
Lost control cornering	12	21	2	2	-	2	5	17	7	2	-	-	70
Collision - obstruction	-	1	-	-	-	-	1	1	-	-	-	-	3
Rear end collision	-	2	-	-	-	-	-	-	-	-	-	-	2
Turning V Same Direction	-	1	-	-	-	-	-	-	-	-	-	-	1
Crossing Vehicle Not Turning	1	4	-	-	-	-	-	-	-	-	-	-	5
Crossing Vehicle Turning	5	5	-	-	-	-	-	-	-	-	-	-	10
Merging Traffic	-	1	-	-	-	-	-	-	-	-	-	-	1
Right Turn Against	2	4	-	1	-	-	-	1	-	-	-	-	8
Manoeuvring	-	2	-	-	-	-	-	-	-	-	-	-	2
Miscellaneous	2	2	-	-	-	-	-	-	-	-	-	-	4
Total	40	113	2	5	1	3	12	20	10	5	-	-	221

FIGURE 6: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY CRASH TYPE

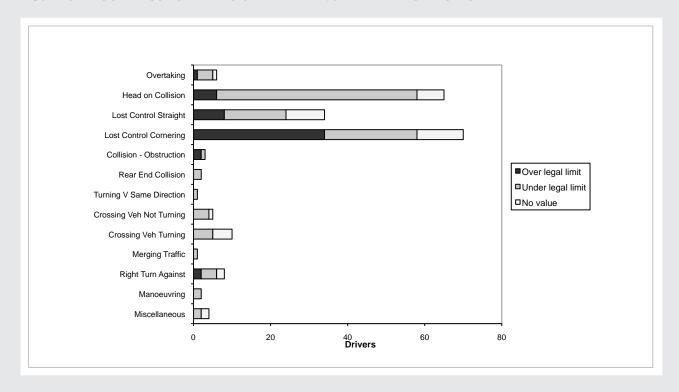




TABLE 6: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF VEHICLE

			Blood Alcohol levels (1)											
Vehicle type	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total	
Car	25	66	-	3	1	1	8	13	9	2	-	-	128	
Motorcycle	7	29	2	1	-	1	2	5	-	1	-	-	48	
Van (2)	6	14	-	1	-	1	2	2	1	2	-	-	29	
Truck	1	4	-	-	-	-	-	-	-	-	-	-	5	
Other	1	-	-	-	-	-	-	-	-	-	-	-	1	
	40	113	2	5	1	3	12	20	10	5	-	-	211	

NOTE: 1. In milligrams of alcohol per 100 millilitres of blood. 2. SUVs are included as vans.

FIGURE 7: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY VEHICLE TYPE

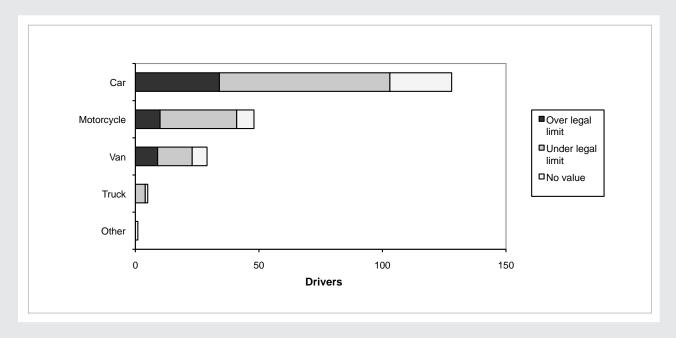


TABLE 7: BLOOD ALCOHOL FOR FATALLY INJURED DRIVERS - HISTORICAL

							Adjusted for non-testing#		
Year	Number of killed drivers	Number tested	Percent tested	Number over legal limit	Percent of drivers over legal limit	Percentage of those tested over the limit	Best estimate of number over the limit	Best estimate of percent over the limit	
	(A)	(B)		(C)	(C/A)	(C/B)			
1987	438	325	74%	151	35%	47%	185	42%	
1988	395	282	71%	122	31%	43%	156	40%	
1989	413	292	71%	135	31%	44%	162	39%	
1990	374	277	74%	137	37%	50%	172	46%	
1991	342	240	70%	108	32%	45%	138	40%	
1992	361	240	67%	98	27%	41%	129	36%	
1993	333	233	70%	88	26%	38%	106	32%	
1994	333	252	76%	105	32%	42%	127	38%	
1995	314	237	76%	78	25%	33%	93	30%	
1996	283	201	71%	66	23%	33%	84	30%	
1997	304	218	72%	46	15%	21%	63	21%	
1998	271	183	68%	56	21%	31%	74	27%	
1999	293	215	73%	50	17%	23%	61	21%	
2000	273	179	66%	55	20%	31%	58	21%	
2001	267	204	76%	44	17%	22%	55	21%	
2002	246	198	81%	52	21%	26%	60	24%	
2003	262	191	73%	59	23%	31%	70	27%	
2004	255	197	77%	57	22%	29%	69	27%	
2005	237	171	72%	45	19%	26%	58	25%	
2006	225	174	77%	46	20%	26%	54	24%	
2007	241	196	81%	56	23%	29%	65	27%	
2008	211	171	81%	53	25%	31%	59	28%	

NOTE: # This gives the best estimate of the number and percentage of all killed drivers likely to have a blood alcohol level over the legal limit after adjusting for the 20% or so of drivers that are not tested. See Note 3 in the summary for more detail.

FIGURE 8: NUMBER OF DRIVERS, NUMBER TESTED FOR ALCOHOL AND PERCENT TESTED FOR ALCOHOL

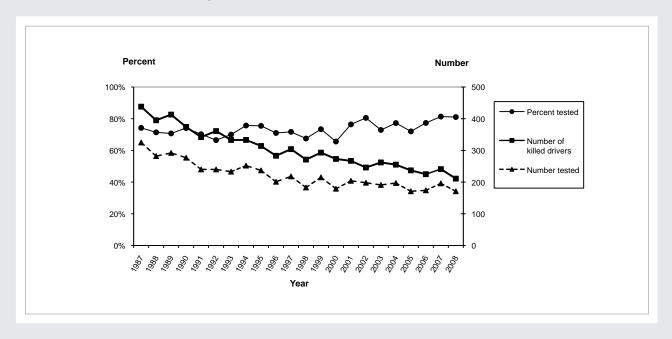




FIGURE 9: NUMBER OF DEAD DRIVERS WHO HAD A BLOOD ALCOHOL LEVEL ABOVE THE LEGAL LIMIT

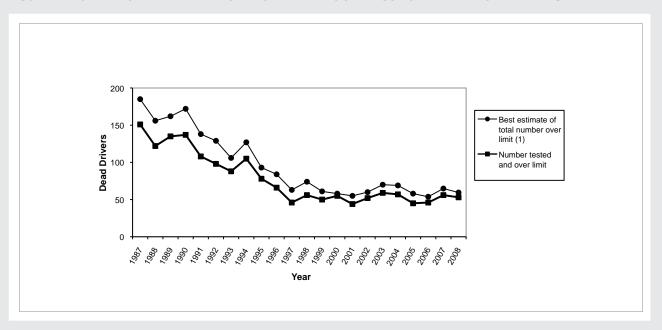
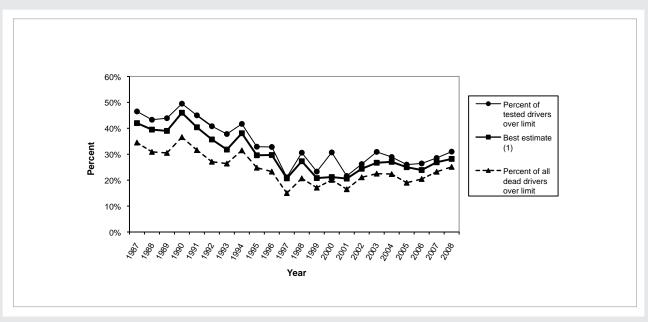


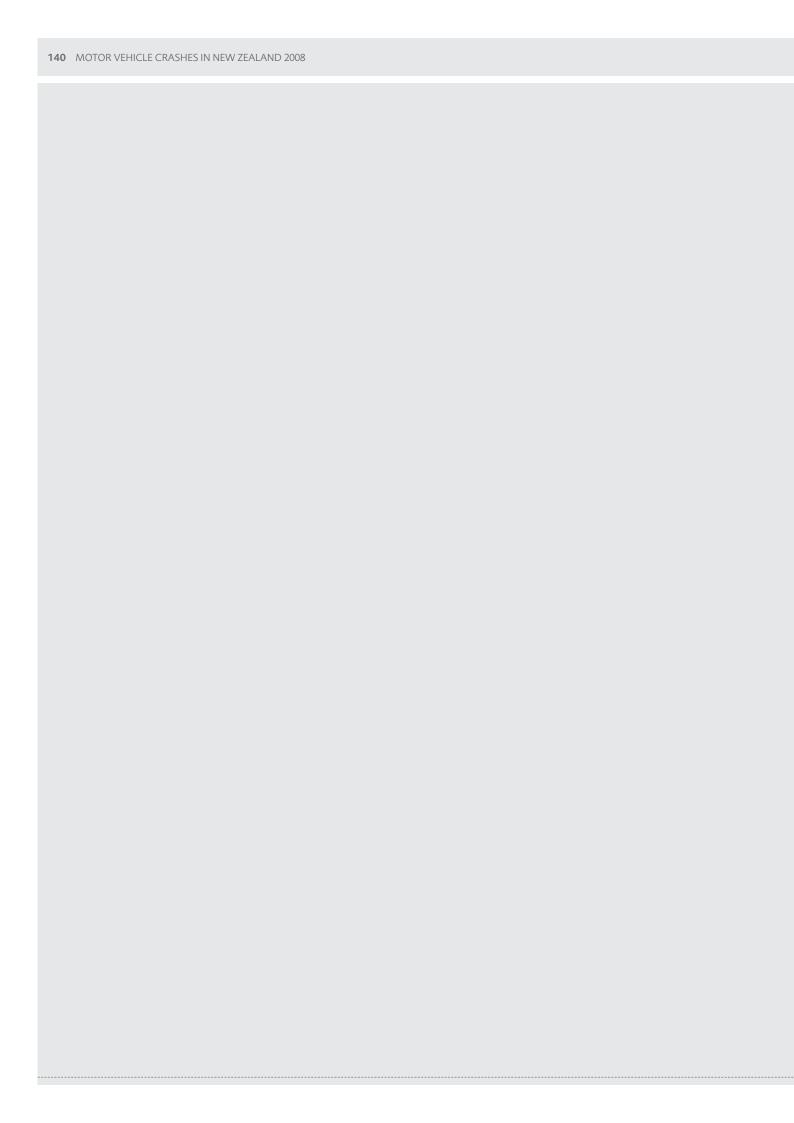
FIGURE 10: PERCENT OF DEAD DRIVERS WHO HAD A BLOOD ALCOHOL LEVEL ABOVE THE LEGAL LIMIT



NOTE: 1. After adjusting for those drivers who were not tested but may have been over the limit. See Note 3 in the summary for more detail.

# INTERNATIONAL COMPARISIONS FOR ROAD DEATHS





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### **NOTES**

- 1. The data in this section are derived from data submitted to the International Road Traffic and Accident Database (IRTAD). Only countries that contribute to the database are included in this section.
- 2. More about IRTAD (from http://internationaltransportforum.org/irtad/ about.html)

## Background

In 1988, the OECD Road Transport Research Programme established the International Road Traffic and Accident Database (IRTAD) as a mechanism for providing an aggregated database, in which international accident and victim as well as exposure data are collected on a continuous basis.

### What is IRTAD?

IRTAD includes both a database and a working group.

The IRTAD database includes accident and traffic data and other safety indicators for 30 countries.

The International Traffic Safety Data and Analysis Group (known as the IRTAD Group) is an on-going working group of the Joint Transport Research of the OECD and the International Transport Forum. It is composed of road safety experts and statisticians from renowned safety research institutes, national road and transport administrations, international organisations, universities, automobilists associations, motorcar industry etc. Its main objectives are to contribute to international co-operation on road accident data and its analysis.

**TABLE 1: INTERNATIONAL COMPARISON OF DEATH RATES** 

Country	Year	Population (Thousand)	Vehicle (Thousand)	Vehicles per capita	Road deaths	Deaths per 100 000 population	Deaths per 10 000 vehicles
AUSTRALIA	2007	21017	14775	0.70	1617	7.7	1.1
AUSTRIA	2007	8299	5475	0.66	691	8.3	1.3
BELGIUM	2007	10585	6362	0.60	1067	10.1	1.7
CANADA	2006	31613	19737	0.62	2892	9.2	1.5
CZECH REPUBLIC	2007	10287	5208	0.51	1222	11.9	2.3
DENMARK	2007	5474	2767	0.51	406	7.4	1.5
FINLAND	2007	5277	3079	0.58	380	7.2	1.2
FRANCE	2007	61538	37909	0.62	4620	7.5	1.2
GERMANY	2007	82366	55511	0.67	4949	6.0	0.9
GREECE	2006	11125	6996	0.63	1657	14.9	2.4
HUNGARY	2007	10064	3546	0.35	1232	12.2	3.5
ICELAND	2007	308	251	0.81	15	4.9	0.6
IRELAND	2007	4331	2442	0.56	338	7.8	1.4
ISRAEL	2007	7244	2251	0.31	398	5.5	1.8
ITALY	2007	59131	-	-	5131	8.7	-
JAPAN	2007	127771	83098	0.65	6639	5.2	0.8
LUXEMBOURG	2007	476	386	0.81	43	9.0	1.1
NETHERLANDS	2007	16358	8863	0.54	709	4.3	0.8
NEW ZEALAND	2007	4228	3189	0.75	422	10.0	1.3
NORWAY	2007	4681	3127	0.67	233	5.0	0.7
POLAND	2007	38115	19471	0.51	5583	14.7	2.9
PORTUGAL	2007	10599	-	-	974	9.2	-
SLOVAKIA	2007	5394	-	-	627	11.6	-
SLOVENIA	2007	2026	1218	0.60	293	14.5	2.4
SOUTH KOREA	2007	48456	19483	0.40	6166	12.7	3.2
SPAIN	2007	44475	28531*	0.64*	3823	8.6	1.3*
SWEDEN	2007	9113	5292	0.58	471	5.2	0.9
SWITZERLAND	2007	7509	5186	0.69	384	5.1	0.7
UNITED KINGDOM	2007	60975	34874	0.57	3059	5.0	0.9
USA	2007	299398*	251423*	0.84*	41259	14.2*	1.6*

 $\label{eq:NOTE:Data} \textbf{NOTE:} \ \ \text{Data} \ \text{are for countries that contribute data to the International Road Traffic and Accident Database.} \ \ \text{Values marked with an * use at least some data from an earlier year.}$ 

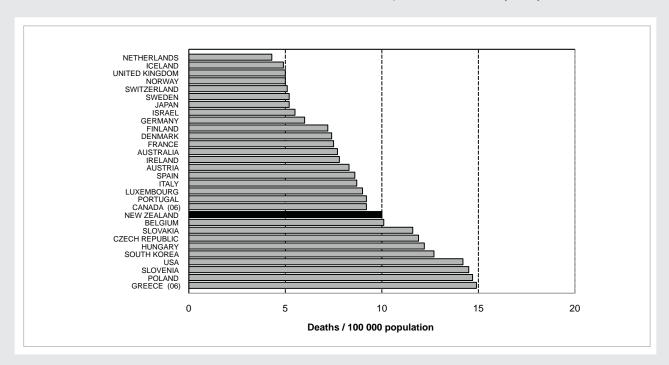
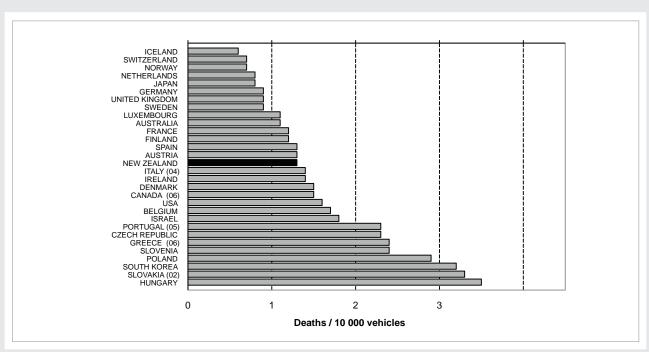


FIGURE 1B: INTERNATIONAL COMPARISON OF DEATHS PER 10,000 VEHICLES (2007)



**TABLE 2: TYPE OF ROAD USER KILLED** 

			Pe	ercentage of deat	hs		
Country	Year	Vehicle occupants #	Motorcyclists (including mopeds)	Pedestrians	Cyclists	Unknown	Total number killed
AUSTRALIA	2007	70.2	14.8	12.5	2.5	0	1617
AUSTRIA	2007	61.6	17.4	15.6	5.4	0.0	691
BELGIUM	2007	60.9	15.2	9.7	8.2	6.0	1067
CANADA	2006	76.3	7.3	13.2	2.5	0.7	2892
CZECH REPUBLIC	2007	59.9	11.4	19.2	9.5	0.0	1222
DENMARK	2007	49.3	20.7	16.7	13.3	0.0	406
FINLAND	2007	70.8	10.8	12.6	5.8	0.0	380
FRANCE	2007	59.8	25.0	12.1	3.1	0.0	4620
GERMANY	2007	59.0	18.3	14.0	8.6	0.0	4949
GREECE	2006	52.4	30.2	16.1	1.3	0.0	1657
HUNGARY	2007	52.2	11.6	23.4	12.8	0.0	1232
ICELAND	2007	73.3	20.0	6.7	0.0	0.0	15
IRELAND	2007	61.8	9.8	24.0	4.4	0.0	338
ISRAEL							
ITALY							
JAPAN	2007	33.5	18.3	33.3	14.9	0.0	6639
LUXEMBOURG							
NETHERLANDS	2007	48.7	17.5	12.1	20.7	1.0	709
NEW ZEALAND	2007	76.8	9.7	10.7	2.8	0.0	422
NORWAY	2007	70.0	17.2	9.9	3.0	0.0	233
POLAND	2007	51.2	4.9	34.9	8.9	0.0	5583
PORTUGAL	2006	55.6	24.1	16.1	4.1	0.0	969
SLOVAKIA							
SLOVENIA	2007	64.8	18.1	10.9	5.8	0.3	293
SOUTH KOREA	2007	37.0	20.7	37.4	4.9	0.0	6166
SPAIN	2007	59.2	23.0	15.5	2.3	0.0	3823
SWEDEN	2007	65.0	15.7	12.3	7.0	0.0	471
SWITZERLAND	2007	48.4	23.2	20.6	7.8	0.0	384
UNITED KINGDOM	2007	53.7	20.1	21.7	4.5	0.0	3059
USA	2006	75.1	11.1	11.2	1.8	0.6	42642

<sup>#</sup> Includes 'other' road users ie those that do not fit in any other category.

TABLE 3: DEATHS PER 100,000 POPULATION BY AGE GROUP

				Ag	e group in ye	ars			
Country	Year	0 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	Over 64	All ages
AUSTRALIA	2007	1.7	13.0	11.0	7.7	7.3	5.7	9.2	7.7
AUSTRIA	2007	1.0	16.4	9.2	7.5	7.6	7.9	10.3	8.3
BELGIUM	2007	1.7	18.9	15.7	11.0	8.6	8.4	9.3	10.1
CANADA	2006	1.7	16.9	11.5	8.4	8.2	8.1	10.8	9.2
CZECH REPUBLIC	2007	1.7	16.3	14.6	13.1	12.4	9.9	13.6	11.9
DENMARK	2007	2.0	11.9	8.4	8.8	7.0	4.4	11.2	7.4
FINLAND	2007	1.6	14.2	9.4	4.8	6.9	6.4	9.1	7.2
FRANCE	2007	1.5	15.1	10.3	7.6	6.2	5.2	8.7	7.5
GERMANY	2007	1.0	11.9	7.2	4.9	5.9	4.8	7.2	6.0
GREECE	2006	2.3	26.0	22.1	15.0	11.7	9.2	15.9	14.9
HUNGARY									
ICELAND									
IRELAND	2007	1.8	14.2	7.9	7.1	5.4	8.1	12.3	7.8
ISRAEL	2006	2.3	9.8	5.8	3.6	6.2	6.0	11.9	5.9
ITALY									
JAPAN	2007	0.8	5.8	3.2	2.9	3.5	4.7	11.7	5.2
LUXEMBOURG									
NETHERLANDS	2007	1.2	8.4	4.9	3.5	2.9	3.2	7.6	4.3
NEW ZEALAND	2007	3.0	21.2	11.4	8.9	8.6	6.8	11.8	10.0
NORWAY	2007	1.0	7.5	6.5	4.4	5.3	4.1	7.4	5.0
POLAND	2007	2.6	19.2	15.8	14.6	16.0	14.8	18.4	14.7
PORTUGAL	2005	1.9	19.8	14.3	12.9	11.2	10.9	12.3	11.8
SLOVAKIA									
SLOVENIA	2006	3.2	25.1	18.8	15.2	10.6	8.9	10.3	13.1
SOUTH KOREA	2007	2.3	9.2	9.0	10.1	14.8	20.4	37.1	12.7
SPAIN	2006	1.8	14.8	12.9	10.0	8.4	7.8	9.0	9.3
SWEDEN	2007	0.6	9.3	5.3	4.4	5.5	5.4	6.6	5.2
SWITZERLAND	2007	1.2	8.6	4.8	3.2	3.3	5.8	9.6	5.1
UNITED KINGDOM	2007	0.9	10.2	6.3	4.9	4.4	3.4	5.9	5.0
USA	2005	3.2	25.5	17.7	15.0	14.5	13.8	17.7	14.7



TABLE 4: PERCENTAGE OF DEATHS BY AGE GROUP

				Ag	e group in ye	ars			
Country	Year	0 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	Over 64	Unknown age
AUSTRALIA	2007	4.3	23.5	19.9	14.7	13.1	8.2	15.6	0.6
AUSTRIA	2007	1.9	24.2	14.5	15.1	12.9	10.6	21.0	0.0
BELGIUM	2007	2.8	22.7	20.1	16.3	12.2	9.7	15.8	0.6
CANADA	2006	3.3	24.7	15.9	14.0	14.2	10.3	16.1	1.5
CZECH REPUBLIC	2007	2.0	17.9	20.7	15.1	14.4	11.5	16.5	1.9
DENMARK	2007	4.9	18.7	14.3	17.7	12.8	7.9	23.4	0.2
FINLAND	2007	3.7	24.5	16.1	8.9	13.9	12.1	20.8	0.0
FRANCE	2007	3.5	25.6	17.9	14.4	11.3	8.0	19.1	0.2
GERMANY	2007	2.2	23.2	14.2	13.5	14.3	9.3	23.3	0.1
GREECE	2006	2.2	20.8	22.8	15.3	10.7	6.9	19.7	1.6
HUNGARY									
ICELAND	2007	6.7	13.3	20.0	26.7	6.7	6.7	20.0	0.0
IRELAND	2007	4.7	26.6	17.8	13.3	8.6	10.1	17.2	1.8
ISRAEL	2007	7.0	23.9	17.8	10.1	13.3	8.3	19.6	0.0
ITALY									
JAPAN	2007	2.1	11.8	8.3	7.7	8.3	13.3	48.4	0.0
LUXEMBOURG									
NETHERLANDS	2007	5.1	23.4	14.2	13.0	9.6	9.2	25.5	0.0
NEW ZEALAND	2007	6.4	30.8	14.7	13.3	11.8	7.1	14.7	1.2
NORWAY	2007	3.9	18.9	17.2	13.3	14.2	9.9	21.9	0.9
POLAND	2007	2.8	20.3	17.2	12.7	16.6	11.7	16.9	1.7
PORTUGAL	2006	2.2	14.0	20.9	15.1	12.0	12.0	22.2	1.5
SLOVAKIA									
SLOVENIA	2007	2.0	23.9	22.2	14.3	13.3	6.8	17.4	0.0
SOUTH KOREA	2007	3.3	9.8	11.6	13.9	18.0	14.4	29.0	0.0
SPAIN	2007	2.8	18.0	23.5	16.9	12.3	9.6	15.7	1.1
SWEDEN	2007	2.1	22.9	13.0	12.1	13.6	14.0	22.3	0.0
SWITZERLAND	2007	3.6	20.1	12.2	10.4	9.4	13.8	30.5	0.0
UNITED KINGDOM	2007	3.1	27.2	16.3	14.8	11.5	8.1	18.8	0.3
USA	2006	4.2	25.2	16.8	14.9	14.6	9.8	14.1	0.4

FIGURE 2: AGE DISTRIBUTION OF ROAD DEATHS FOR SELECTED COUNTRIES

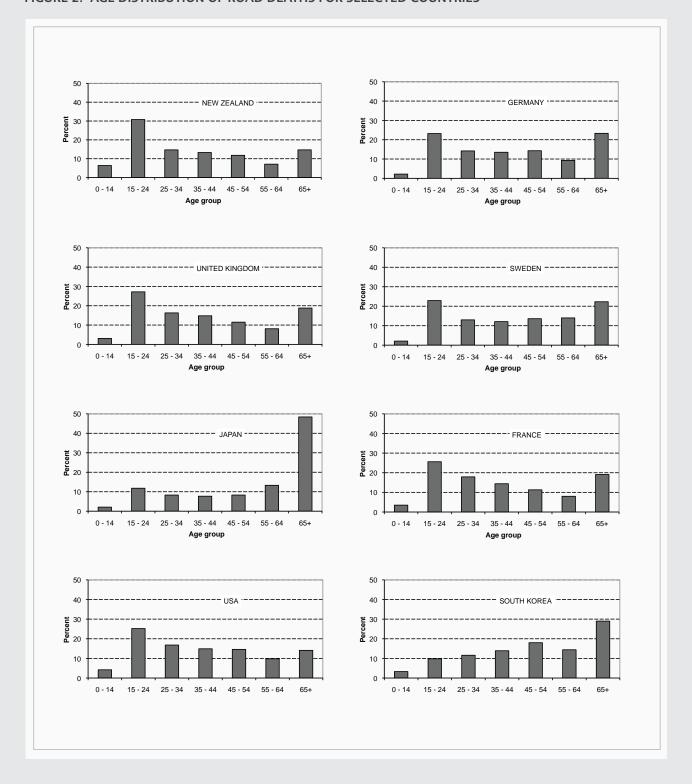




TABLE 5: DEATHS PER 100,000 POPULATION BY YEAR

						Year					
Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AUSTRALIA	9.5	9.4	9.3	9.5	9.0	8.7	8.2	7.9	8.0	7.7	7.7
AUSTRIA	13.9	12.1	13.5	12.2	11.9	11.8	11.5	10.7	9.3	8.8	8.3
BELGIUM	13.4	14.7	13.7	14.4	14.5	13.1	11.7	11.2	10.4	10.2	10.1
CANADA	10.2	9.7	9.8	9.5	8.9	9.3	8.7	8.5	9.1	9.2	
CZECH REPUBLIC	15.5	13.2	14.1	14.5	13.0	14.0	14.2	13.5	12.6	10.4	11.9
DENMARK	9.3	9.4	9.7	9.3	8.1	8.6	8.0	6.8	6.1	5.6	7.4
FINLAND	8.5	7.8	8.4	7.7	8.4	8.0	7.3	7.2	7.2	6.4	7.2
FRANCE	14.4	15.2	14.4	13.6	13.8	12.9	10.2	9.3	8.8	7.7	7.5
GERMANY	10.4	9.5	9.5	9.1	8.5	8.3	8.0	7.1	6.5	6.2	6.0
GREECE	20.1	20.8	20.1	18.7	17.2	14.9	14.6	15.1	15.0	14.9	
HUNGARY	13.7	13.5	12.9	12.0	12.2	14.0	13.1	12.8	12.7	12.9	12.2
ICELAND	5.6	9.9	7.6	11.5	8.5	10.1	8.0	7.9	6.5	10.3	4.9
IRELAND	12.9	12.4	11.0	11.0	10.7	9.6	8.4	8.8	9.7	8.6	7.8
ISRAEL	9.0	9.1	7.7	7.2	8.3	7.9	6.7	7.0	6.5	5.9	5.5
ITALY	11.7	11.9	11.6	12.2	12.3	12.3	11.5	10.6	10.0	9.7	8.7
JAPAN	8.9	8.5	8.2	8.2	7.9	7.5	7.0	6.7	6.2	5.7	5.2
LUXEMBOURG	14.4	13.4	13.5	17.5	16.0	14.0	11.8	11.0	10.2	7.7	9.0
NETHERLANDS	7.5	6.8	6.9	6.8	6.2	6.1	6.4	5.0	4.6	4.5	4.3
NEW ZEALAND	14.4	13.2	13.4	12.1	11.8	10.3	11.5	10.7	9.9	9.5	10.0
NORWAY	6.9	8.0	6.8	7.6	6.1	6.9	6.2	5.6	4.8	5.2	5.0
POLAND	18.9	18.3	17.4	16.3	14.3	15.3	14.8	15.0	14.3	13.8	14.7
PORTUGAL	23.4	22.4	21.0	18.1	16.2	16.1	14.8	12.3	11.8	9.2	9.2
SLOVAKIA	14.6	15.2	12.0	11.6	11.4	11.3	12.0	11.2	10.4	10.7	11.6
SLOVENIA	18.0	15.6	16.9	15.8	13.9	13.5	12.1	13.7	12.9	13.1	14.5
SOUTH KOREA	29.0	22.5	23.1	21.8	17.1	15.2	15.1	13.7	13.2	13.1	12.7
SPAIN	14.3	15.1	14.5	14.5	13.8	12.9	12.8	11.0	10.2	9.3	8.6
SWEDEN	6.1	6.0	6.6	6.7	6.2	6.0	5.9	5.4	4.9	4.9	5.2
SWITZERLAND	8.3	8.4	8.2	8.3	7.6	7.1	7.5	6.9	5.5	5.0	5.1
TURKEY											
UNITED KINGDOM	6.4	6.1	6.1	6.1	6.1	6	6.1	5.6	5.5	5.4	5
USA	15.7	15.4	15.3	15.3	14.8	14.9	14.8	14.6	14.7	14.2	

TABLE 6: DEATHS PER 10,000 VEHICLES BY YEAR

						Year					
Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AUSTRALIA	1.5	1.5	1.4	1.5	1.4	1.3	1.2	1.2	1.2	1.1	1.1
AUSTRIA	2.4	2.0	2.2	1.9	1.8	1.8	1.8	1.7	1.5	1.4	1.3
BELGIUM	2.6	2.8	2.5	2.6	2.5	2.3	2.0	1.9	1.8	1.7	1.7
CANADA	1.7	1.6	1.7	1.6	1.5	1.6	1.5	1.4	1.5	1.5	
CZECH REPUBLIC	3.9	3.1	3.3	3.4	3.1	3.3	3.2	3.0	2.7	2.1	2.3
DENMARK	2.2	2.1	2.2	2.1	1.8	1.9	1.7	1.5	1.3	1.2	1.5
FINLAND	1.9	1.7	1.8	1.6	1.7	1.6	1.4	1.4	1.3	1.1	1.2
FRANCE	2.9	2.7	2.5	2.4	2.3	2.1	1.7	1.5	1.4	1.3	1.2
GERMANY	1.7	1.6	1.5	1.5	1.3	1.3	1.2	1.1	1.0	0.9	0.9
GREECE	5.2	5.0	4.5	4.0	3.5	2.9	2.7	2.6	2.5	2.4	
HUNGARY	5.0	4.9	4.9	4.4	4.4	4.8	4.2	3.9	3.8	3.8	3.5
ICELAND	1.1	1.8	1.3	1.8	1.3	1.5	1.1	1.1	0.9	1.3	0.6
IRELAND	3.3	3.0	2.6	2.5	2.3	2.0	1.7	1.8	1.9	1.6	1.4
ISRAEL	3.3	3.3	2.8	2.5	2.8	2.7	2.3	2.4	2.1	1.9	1.8
ITALY	1.8	1.8	1.7	1.8	1.7	1.7	1.5	1.4			
JAPAN	1.5	1.4	1.3	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.8
LUXEMBOURG	2.1	1.9	1.9	2.4	2.1	1.8	1.5	1.4	1.3	1.0	1.1
NETHERLANDS	1.7	1.5	1.5	1.4	1.2	1.2	1.2	0.9	0.9	0.8	0.8
NEW ZEALAND	2.3	2.1	2.0	1.8	1.7	1.5	1.6	1.5	1.3	1.3	1.3
NORWAY	1.3	1.4	1.2	1.3	1.0	1.1	1.0	0.9	0.8	0.8	0.7
POLAND	5.9	5.6	5.1	4.5	3.8	3.8	3.5	3.4	3.2	2.9	2.9
PORTUGAL	5.6	5.1	4.4	3.9	3.4	3.3	3.0	2.4	2.3		
SLOVAKIA	5.1	5.2	4.2	4.1	3.9	3.3					
SLOVENIA	4.0	3.3	3.4	3.1	2.7	2.6	2.3	2.5	2.2	2.3	2.4
SOUTH KOREA	9.9	7.1	7.2	6.9	5.1	4.4	4.1	3.6	3.4	3.3	3.2
SPAIN	2.8	2.8	2.6	2.5	2.3	2.1	2.1	1.8	1.6	1.4	
SWEDEN	1.2	1.2	1.3	1.2	1.1	1.1	1.1	0.9	0.9	0.9	0.9
SWITZERLAND	1.4	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.8	0.7	0.7
TURKEY											
UNITED KINGDOM	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1	1	1	0.9
USA	2.1	2	2	1.9	1.9	1.9	1.9	1.8	1.8	1.7	

FIGURE 3: 2007 DEATH RATES COMPARED TO 1997 RATES (1997=1)

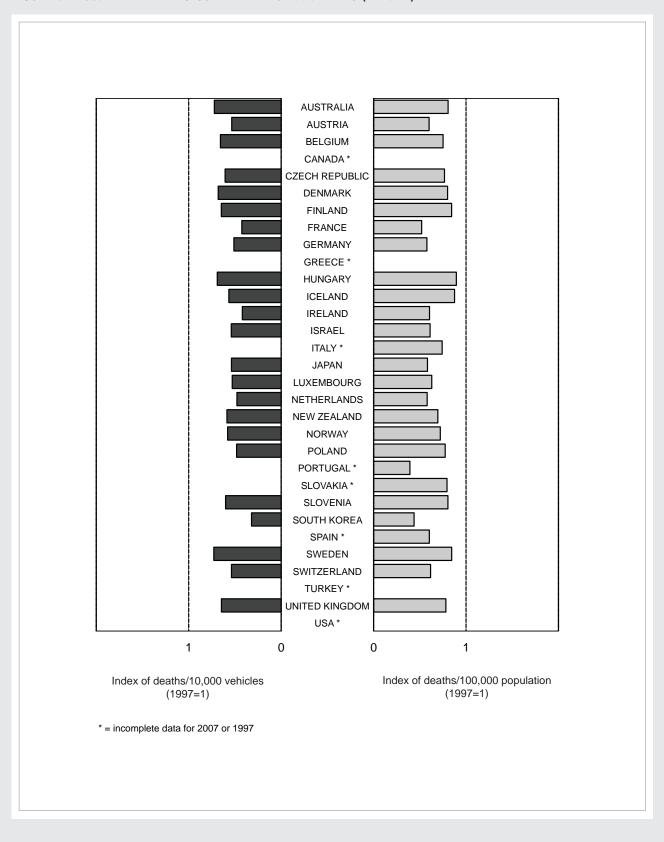
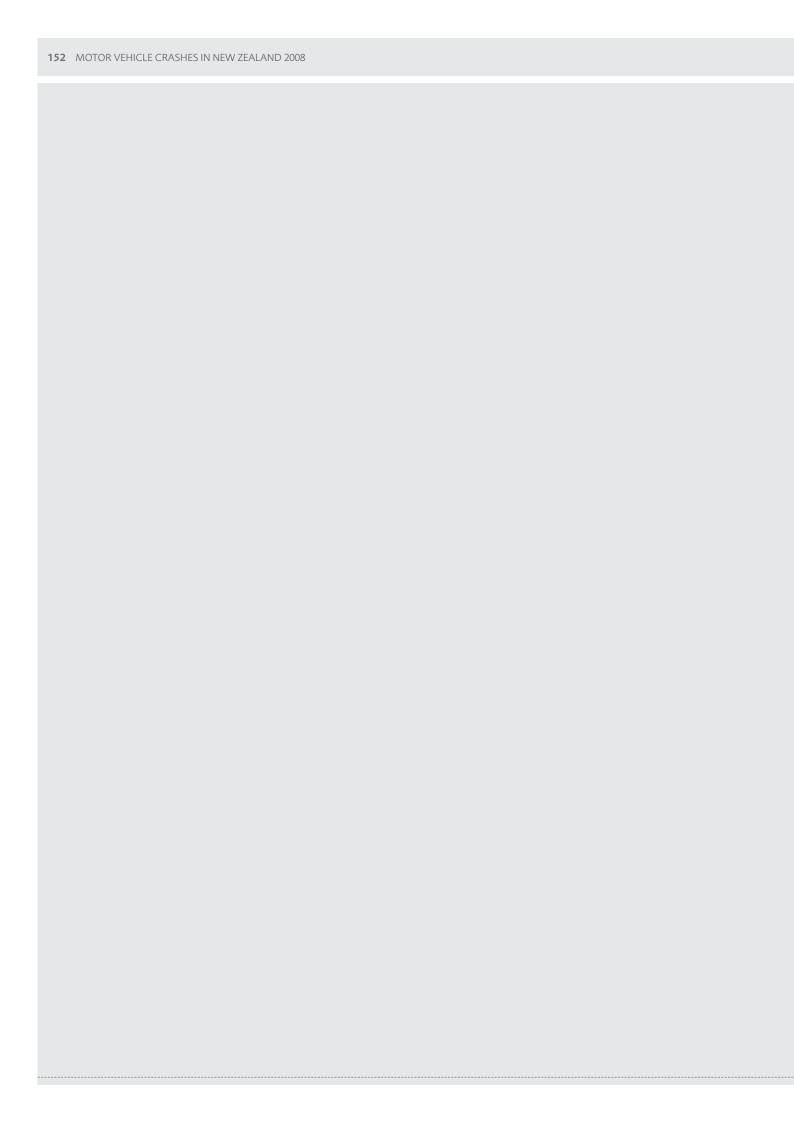


TABLE 7: PERCENTAGE OF DEATHS BY ROAD CATEGORY

		URBAN ROADS		OUTSIDE UR	BAN AREAS		
Country	Year	All urban	Motorways	A-level roads	Other	Total	Total number killed
AUSTRALIA							
AUSTRIA	2007	25.0	10.9	33.4	30.7	75	691
BELGIUM	2007	25.4	14.2	13.5	41.3	74.6	1067
CANADA	2006	36.9	11.4			63.1	2892
CZECH REPUBLIC	2007	36.2	3.9	27.7	32.2	63.8	1222
DENMARK	2007	31.8	6.4	17.7	44.1	68.2	406
FINLAND	2007	21.3	3.7	42.1	32.9	78.7	380
FRANCE	2007	29.4	6.5	9.3	54.8	70.6	4620
GERMANY	2007	27.0	12.2	22.6	38.3	73	4949
GREECE	2006	46.7	8.9	23.1	21.3	53.3	1657
HUNGARY	2006	39.0	4.2			61	1303
ICELAND	2007	6.7				93.3	15
IRELAND	2007	26.9	3.0	36.4	33.7	73.1	338
ISRAEL	2006	45.4				54.6	414
ITALY	2007	44.2	10.3	17.2	28.3	55.8	5131
JAPAN	2007	53.8	2.7			46.2	6639
LUXEMBOURG							
NETHERLANDS	2007	38.1	10.4			61.9	709
NEW ZEALAND	2007	25.1	1.9	45.5	27.5	74.9	422
NORWAY	2006	12.4				87.6	242
POLAND	2007	45.7	0.9			54.3	5583
PORTUGAL	2006	46.2	8.7	7.8	37.2	53.8	969
SLOVAKIA							
SLOVENIA	2006	35.4	11.0	20.9	32.7	64.6	263
SOUTH KOREA	2007	40.0	8.0	29.1	22.9	60.0	6166
SPAIN	2007	19.4	4.3			80.6	3823
SWEDEN	2007	27.0	5.3			73	471
SWITZERLAND	2007	36.7	12.2	35.7	15.4	63.3	384
UNITED KINGDOM	2007	31.5	6.0			68.5	3059
USA	2007	43.4				56.6	41259

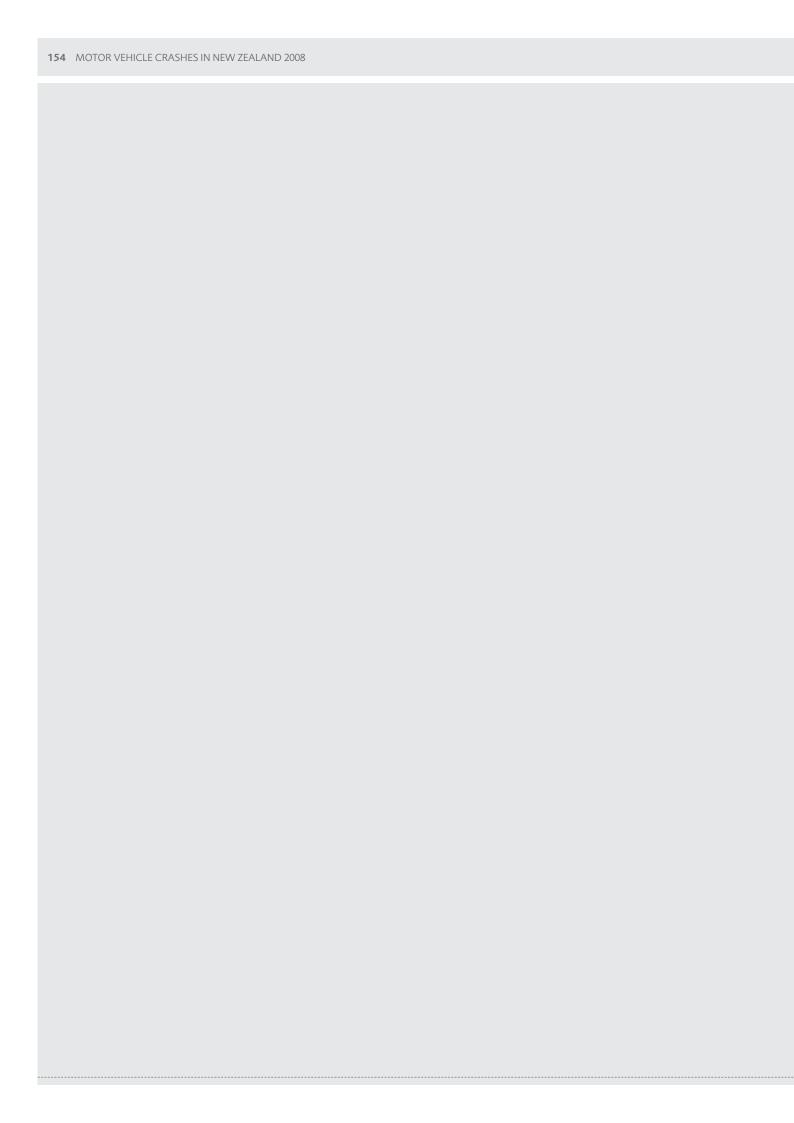
**NOTES:** Data are for countries that contribute data to the International Road Traffic and Accident Database. For New Zealand A-level roads are State Highways excluding motorways.





## ROAD USER BEHAVIOUR SURVEYS





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#### **TABLE 1: SAFETY BELT WEARING RATES FOR FRONT SEAT ADULTS**

In the survey carried out in March and April 2008, about 90,000 adult front seat drivers and passengers were surveyed at 274 sites around the country. Note that this survey was expanded from 114 sites in 2002 to 274 in 2003, so from 2003 results are not strictly comparable with those from earlier surveys.

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	93	90	93	93	98	100	90
Auckland	91	95	96	97	97	96	96
Waikato	94	93	94	96	94	95	97
Bay of Plenty	95	93	95	93	95	94	93
Gisborne	95	96	92	92	96	88	85
Hawke's Bay	90	90	91	91	97	94	89
Taranaki	96	93	92	96	95	95	96
Manawatu-Wanganui	88	88	92	92	96	96	96
Wellington	93	91	94	96	96	95	95
Nelson-Marlborough	95	96	96	97	97	97	97
West Coast	90	90	93	94	95	95	96
Canterbury	93	92	94	95	94	97	96
Otago	95	92	94	94	95	95	97
Southland	87	93	96	97	95	95	96
New Zealand	92	92	94	95	95	95	95

### **TABLE 2: SAFETY BELT WEARING RATES FOR REAR SEAT ADULTS**

In the survey carried out in November/December 2008, more than 9000 adults seated in the rear seats of cars were observed at 139 sites around the country.

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	84	87	89	94	99	71	73
Auckland	84	82	90	82	93	92	88
Waikato	78	82	85	83	83	88	83
Bay of Plenty	79	70	78	85	90	76	86
Gisborne	54	69	59	97	86	92	*see note
Hawke's Bay	81	76	87	96	90	84	87
Taranaki	81	83	81	92	91	93	94
Manawatu-Wanganui	79	85	85	87	94	92	92
Wellington	77	82	87	84	89	87	89
Nelson-Marlborough	77	90	93	89	88	87	83
West Coast	79	78	85	89	95	91	91
Canterbury	76	82	88	85	87	91	92
Otago	88	79	78	88	92	84	79
Southland	67	88	74	70	64	71	78
New Zealand	80	81	86	86	89	87	87

<sup>\*</sup> NOTE: Sample too small in this area to provide regional estimates.

#### **TABLE 3: CHILD RESTRAINTS IN CARS**

In the survey carried out in September 2008, children aged under five years in more than 4800 cars were observed at 112 sites around the country. The table shows the percentage restrained in appropriate child restraints. In the 2008 survey 52 percent were restrained in child seats, 23 percent in booster seats, 13 percent in infant seats and less than 1 percent in child harnesses. A further 5 percent were restrained by adult safety belts. The remaining 5 percent were not restrained at all.

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	85	84	95	98	100	95	88
Auckland	83	82	81	86	92	90	90
Waikato	88	90	87	89	87	89	93
Bay of Plenty	87	78	81	91	89	86	87
Gisborne	69	76	88	92	83	100	94
Hawke's Bay	94	83	92	98	89	92	92
Taranaki	95	91	94	87	95	96	96
Manawatu-Wanganui	84	89	94	91	94	97	95
Wellington	82	90	89	91	92	90	81
Nelson-Marlborough	94	92	93	91	93	91	96
West Coast	92	92	92	92	93	96	99
Canterbury	91	93	93	83	85	90	91
Otago	97	90	95	91	91	98	96
Southland	81	88	83	94	92	90	95
New Zealand	86	86	87	89	91	91	90

#### **TABLE 4: CYCLE HELMET WEARING RATES**

In the survey carried out in March and April 2008, more than 5700 cyclists of primary and intermediate school age, secondary school age and adults were surveyed at 58 sites around the country.

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	81	69	85	91	91	77	84
Auckland	79	76	85	76	89	89	85
Waikato	92	93	91	91	88	89	82
Bay of Plenty	87	87	84	87	93	93	92
Gisborne	92	96	92	93	93	79	96
Hawke's Bay	84	85	95	94	98	90	94
Taranaki	90	86	92	92	95	98	90
Manawatu-Wanganui	87	92	93	95	96	93	94
Wellington	92	91	94	93	95	88	95
Nelson-Marlborough	96	95	95	92	94	93	93
West Coast	62	87	95	82	88	94	94
Canterbury	92	89	94	90	98	96	97
Otago	85	91	98	94	91	93	93
Southland	93	92	95	94	95	95	92
New Zealand	89	89	92	91	94	92	92



## **OPEN ROAD CAR SPEEDS**

In the survey of open road speeds of cars carried out in July/August 2008, about 12,900 cars were surveyed at about 65 sites around the country.

The speed surveys are designed to monitor changes in free speeds of vehicles. That is, speeds attained when the vehicle is unimpeded by the presence of other vehicles (ie, there is some distance between a vehicle travelling at a free speed and the vehicle in front of it) or by environmental features such as traffic lights, intersections, hills, corners or road works. By monitoring the speeds of unimpeded vehicles, these surveys measure driver choice of speed.

The regional surveys are designed to track changes over time in driver speed choice within regions. They are not designed to provide valid comparisons between regions.

TABLE 5: MEAN OPEN ROAD SPEEDS (KM/H)

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	96.3	95.7	96.5	95.9	96.0	95.0	96.3
Auckland	100.5	98.5	97.0	97.0	96.5	96.2	95.3
Waikato	97.2	97.0	97.0	96.2	96.6	95.2	94.6
Bay of Plenty	96.4	95.1	96.4	95.5	91.2	91.5	95.4
Gisborne	99.6	97.7	97.3	96.2	97.3	97.8	95.8
Hawke's Bay	101.4	100.0	99.0	98.0	96.1	96.3	99.8
Taranaki	98.5	97.7	98.1	96.2	94.2	94.4	94.3
Manawatu-Wanganui	102.8	100.8	101.1	101.2	97.3	97.7	97.0
Wellington	96.2	97.4	96.2	96.6	92.1	93.2	94.0
Nelson-Marlborough	-	-	-	-	-	-	*see note
West Coast	-	-	-	-	-	-	*see note
Canterbury	101.5	100.0	99.3	99.1	100.2	99.3	98.5
Otago	99.3	97.4	97.9	98.0	97.3	99.8	100.9
Southland	99.7	99.2	98.3	-	*see note	99.4	100.1
New Zealand	99.1	98.0	97.8	97.1	96.4	96.3	96.6

TABLE 6: 85TH PERCENTILE OPEN ROAD SPEEDS (KM/H)

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	105	105	105	105	104	102	104
Auckland	113	112	110	110	109	109	108
Waikato	104	103	103	102	102	101	101
Bay of Plenty	107	105	107	105	101	101	106
Gisborne	110	108	108	106	107	107	105
Hawke's Bay	108	106	106	104	101	101	105
Taranaki	108	105	105	103	102	102	102
Manawatu-Wanganui	110	107	108	108	104	103	103
Wellington	105	106	104	105	101	102	102
Nelson-Marlborough	-	-	-	-	-	-	*see note
West Coast	-	-	-	-	-	-	*see note
Canterbury	108	106	105	104	105	104	103
Otago	107	105	105	104	104	105	105
Southland	107	107	104	-	*see note	105	106
New Zealand	107	105	105	104	103	103	103

85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.

<sup>\*</sup> NOTE: Too few sites in this area to provide regional estimates.

## **URBAN CAR SPEEDS**

In the survey of urban speeds of cars carried out in July/August 2008, about 16,900 cars were surveyed at about 65 sites around the country.

The speed surveys are designed to monitor changes in free speeds of vehicles. That is, speeds attained when the vehicle is unimpeded by the presence of other vehicles ie there is some distance between a vehicle travelling at a free speed and the vehicle in front of it) or by environmental features such as traffic lights, intersections, hills, corners or road works. By monitoring the speeds of unimpeded vehicles, these surveys measure driver choice of speed.

The regional surveys are designed to track changes over time in driver speed choice within regions, they are not designed to provide valid comparisons between regions.

TABLE 7: MEAN URBAN SPEEDS (KM/H)

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	53.0	53.1	51.8	51.6	53.0	53.0	52.4
Auckland	56.3	55.9	54.5	54.5	55.4	55.3	55.1
Waikato	55.2	55.8	54.4	53.7	53.9	52.2	52.5
Bay of Plenty	50.5	49.5	49.6	49.6	47.4	48.2	49.5
Gisborne	57.0	56.6	56.0	55.6	55.7	55.2	55.8
Hawke's Bay	54.3	53.7	53.3	51.3	52.3	51.7	52.2
Taranaki	51.6	51.2	50.3	49.5	48.4	48.9	48.2
Manawatu-Wanganui	53.7	51.9	51.5	51.8	50.3	50.2	51.6
Wellington	52.3	51.5	50.8	49.9	49.1	49.4	49.7
Nelson-Marlborough	51.9	50.1	50.4	49.7	49.0	49.0	50.4
West Coast	-	-	-	-	-	-	*note
Canterbury	53.8	53.2	52.1	52.3	52.5	52.5	52.1
Otago	53.2	52.7	52.3	-	53.1	52.4	51.4
Southland	54.6	54.2	54.4	-	-	55.1	54.4
New Zealand	54.3	53.7	52.9	52.4	52.6	52.5	52.6

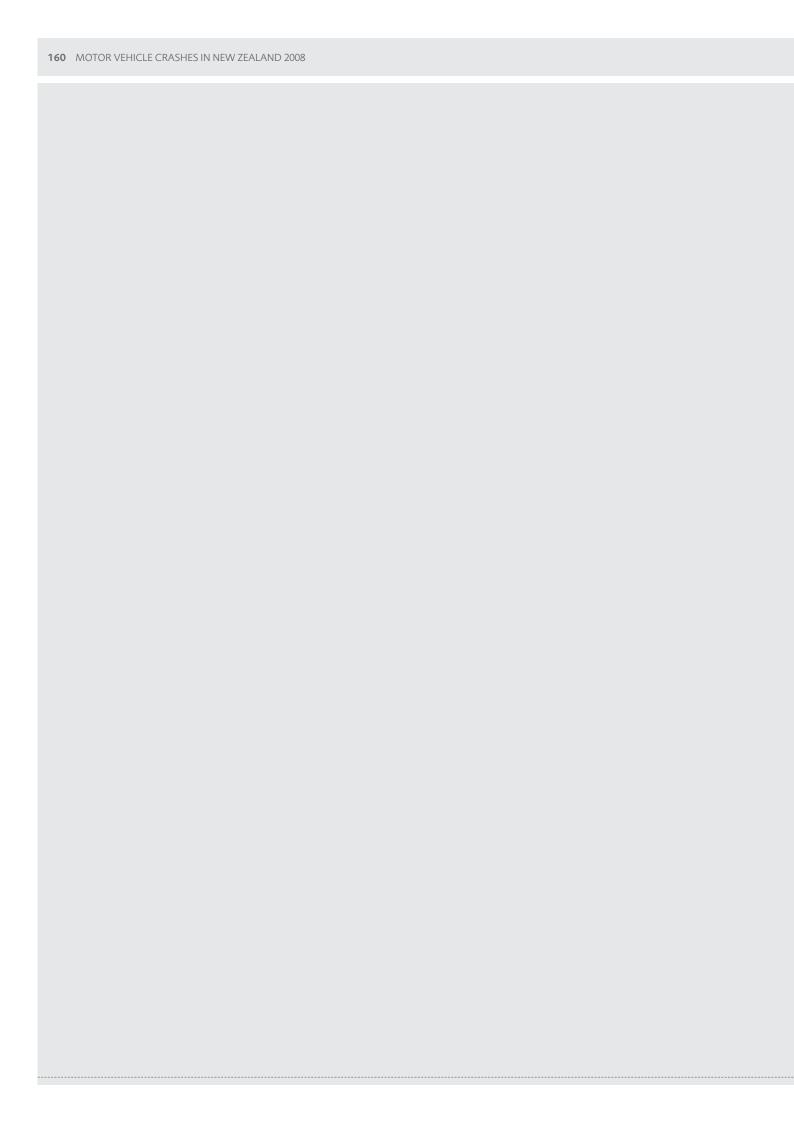
TABLE 8: 85TH PERCENTILE URBAN SPEEDS (KM/H)

REGION	2002	2003	2004	2005	2006	2007	2008
Northland	59.0	58.5	57.0	57.0	57.5	58.0	57.0
Auckland	62.0	61.0	59.5	59.0	60.0	60.0	60.0
Waikato	61.0	61.5	60.0	59.5	59.5	58.0	58.0
Bay of Plenty	56.5	55.5	55.0	54.5	53.0	53.5	54.0
Gisborne	63.5	63.5	62.5	62.5	61.5	61.5	62.5
Hawke's Bay	60.5	59.0	58.5	56.5	57.0	57.0	57.0
Taranaki	56.5	56.5	55.0	55.0	54.0	54.0	53.0
Manawatu-Wanganui	59.5	57.0	56.5	56.5	55.0	55.0	56.0
Wellington	57.0	56.0	55.0	54.0	53.0	53.0	53.5
Nelson-Marlborough	57.0	55.5	55.0	54.5	53.5	53.5	54.5
West Coast				-	-	-	*note
Canterbury	59.0	59.0	58.0	58.0	58.0	59.0	58.0
Otago	58.0	58.0	57.0	-	57.0	57.0	56.5
Southland	60.5	59.0	60.0	-	*note	60.5	59.5
New Zealand	60.5	59.5	58.0	58.0	58.0	58.0	58.0

85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.



<sup>\*</sup> NOTE: Too few sites in this area to provide regional estimates.



## **DRIVER LICENCE AND VEHICLE FLEET STATISTICS**



### NUMBER OF CAR LICENCES HELD BY AGE AND SEX OF LICENCE HOLDER AS AT 20 JUNE 2008

Age group	Lear	ner	Restricted		Fu	Total	
years	Males	Females	Males	Females	Males	Females	
15 years	10300	8900	1922	1137			22259
16 years	9757	9856	9251	6422	836	496	36618
17 years	8642	9384	9969	8227	5536	3791	45549
18 years	7408	8951	9484	8714	9110	6368	50035
19 years	6471	7984	8514	8564	11701	8255	51489
20 to 24	25152	33802	36271	41369	83299	58930	278823
25 to 29	15528	22670	24059	32297	109753	86463	290770
30 to 34	9370	13896	15046	22680	126769	113397	301158
35 to 39	5461	9321	7327	12884	144150	137619	316762
40 to 44	3433	7197	3720	7241	158531	150082	330204
45 to 49	1985	4728	2014	4080	153240	145853	311900
50 to 54	1360	3281	1327	2144	138772	129916	276800
55 to 59	904	1686	758	1124	116920	108112	229504
60 to 64	623	937	478	594	103577	95064	201273
65 to 69	441	400	331	275	74750	68689	144886
70 to 74	302	202	251	97	59863	53572	114287
75 to 79	31	30	60	37	42468	37802	80428
80 and over	2	5	16	9	35775	31981	67788
Total	107170	143230	130798	157895	1375050	1236390	3150533

#### NUMBER OF MOTORCYCLE LICENCES HELD BY AGE AND SEX OF LICENCE HOLDER AS AT 20 JUNE 2008

Age group	lge group Learner		Restri	cted	Ful	Total	
years	Males	Females	Males	Females	Males	Females	
15 years	250	30	19	4			303
16 years	381	38	130	10	5		564
17 years	524	50	155	7	46	1	783
18 years	617	55	145	16	71	7	911
19 years	684	74	211	12	102	6	1089
20 to 24	5500	672	1463	128	954	64	8781
25 to 29	7362	1192	1630	213	2754	297	13448
30 to 34	11296	2262	2071	316	7854	989	24788
35 to 39	8563	2560	1913	552	21697	4810	40095
40 to 44	3808	1452	930	342	40739	11156	58427
45 to 49	2179	780	552	228	52459	14226	70424
50 to 54	1235	520	307	133	52361	15124	69680
55 to 59	683	254	180	70	42932	10439	54558
60 to 64	358	115	82	31	42039	8710	51335
65 to 69	144	34	36	13	31123	5795	37145
70 to 74	71	11	19	5	24659	3797	28562
75 to 79	15	2	3	2	16689	2112	18823
80 and over	5	1			3131	289	3426
Total	43675	10102	9846	2082	339615	77822	483142

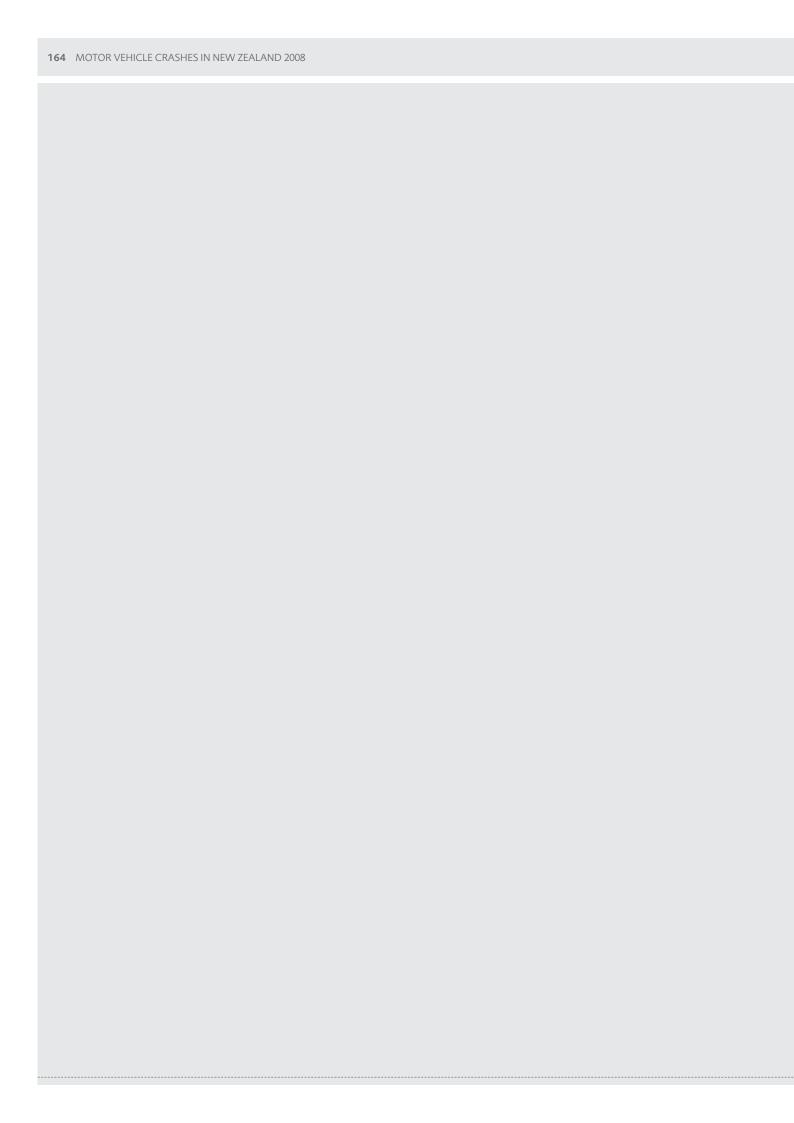
NOTE: The tables include all drivers eligible to be on the road as at the stated date. Disqualified and expired licences are excluded. **SOURCE**: National Register of Driver Licences (maintained by NZ Transport Agency).

### **VEHICLE FLEET AS AT 30 JUNE 2008**

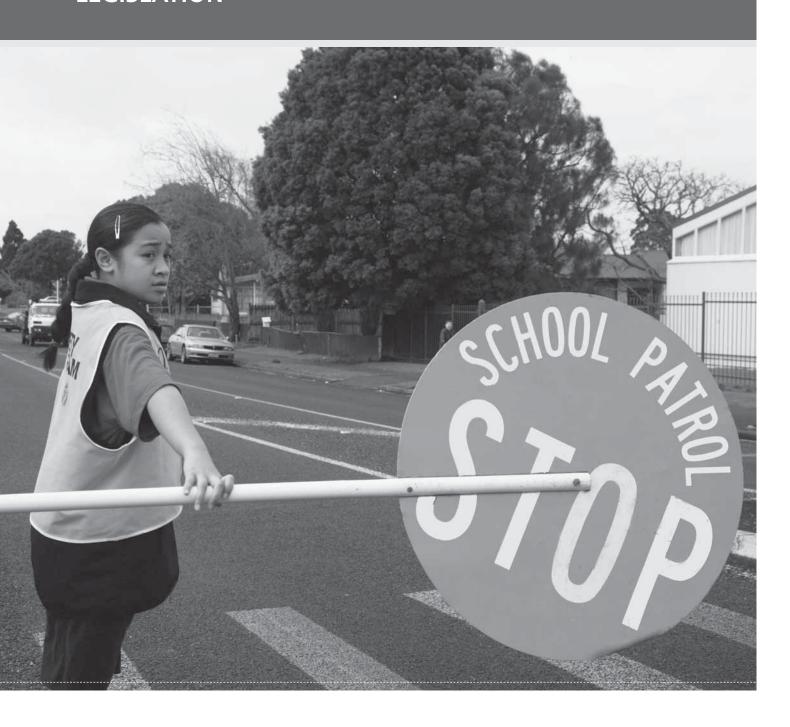
VEHICLE DESCRIPTION	TOTAL FLEET	EXCLUDING EXEMPT AND RESTORATION LICENCES
Moped	28756	25304
Trailer/Caravan	577684	554197
Tractor	36304	35116
Agricultural Machine	1560	1440
Trailer not designed for highway use	1188	1139
Mobile Machine	14909	14341
Passenger Car/Van	2788938	2631014
Goods Van/Truck/Utility	519992	478336
Bus	21176	19708
Motor Caravan	26517	21754
Motorcycle	101457	71648
ATV	4760	4602
Special Purpose Vehicle	2691	2440
Total	4125932	3861039
Vehicles Used For Crash Rate Calculation (Table 1, Page 14)		3247764

SOURCE: Motor vehicle register, NZ Transport Agency

NOTES: The Total Fleet is the number of vehicles recorded in the Motor Vehicle Register, excluding vehicles with cancelled/lapsed registration. The shaded cells in the table above indicate the vehicle categories included for the purpose of calculating crash rates (see Table 1, page 14). These include motorised vehicles designed primarily for on road use and exclude vehicles with an exempt or restoration licence.



# LEGISLATION



## **LEGISLATION**

The following is a brief listing of traffic legislation introduced since 1965.

Further information can be obtained from Transport and Land Transport Amendment Acts, the Driver Licensing Rule, the annual reports of the Ministry of Transport and Land Transport New Zealand, Transport Law published by Butterworths and Brooker's Law of Transportation.

- 1965 1. All new motor cars, station wagons and light trucks must be fitted with safety belts.
- **1967** 1. Introduction of the demerit points system.
  - 2. Driving at an 'unreasonably slow speed' became a traffic offence.
- 1969 1. Introduction of breath and blood alcohol tests.
  - 2. Introduction of parking infringement system.
  - 3. Minimum tread depth for pneumatic tyres prescribed.
- 1971 1. Speeding Infringement System introduced.
- 1972 1. Compulsory testing for blood alcohol of accident victims at hospitals.
  - 2. Compulsory fitting and wearing of safety belts for certain drivers and front seat passengers 15 years and over in light vehicles registered since 1965.
- 1973 1. Safety helmets compulsory for motor cyclists and pillion riders at all speeds, previously (from 1956) they were only compulsory if travelling in excess of 30 mph (50 km/h).
  - 2. Maximum open road speed limit reduced from 55 mph to 50 mph (80 km/h) as part of fuel conservation measures. Effective from 4 December 1973.
- 1975 1. Seat belt requirements (see 1972 above) extended to motor vehicles registered on or after 1 January 1955.
  - 2. Change over to metric speed limits and road signs.
- **1977** 1. New traffic regulations. (Traffic Regulations 1976) came into effect bringing major changes to give way rules, intersections and pedestrian crossings.
- 1978 1. Introduction of evidential breath testing. Lowering of permissible blood alcohol level from 100 milligrams of alcohol per 100 millilitres of

- blood to 80 milligrams per 100 millilitres. Tougher criteria for issue of limited licences to disqualified drivers.
- 1979 1. Age for compulsory seat belt use lowered to eight years old.
- 1980 1. Introduction of Traffic Infringement Systems to speed up processing of minor traffic offences plus notices of prosecution servable on roads.
- 1981 1. Traffic Regulations 1976 heavily amended to provide legal framework for safe installation and inspection of alternative fuel systems.
- 1983 1. The Transport Amendment Act (No. 2) 1983. Introduced to provide an orderly phase-out of the 150-km rail protection by allowing shippers, upon payment of a long distance haulage fee, to use road transport in circumstances in which they were previously required to use rail. Effective from 1 November 1983.
  - 2. The Transport Amendment Act (No. 3) 1983. Allowing the Court to make an order requiring a person, convicted twice or more in a five year period of specific alcohol or drug related traffic offences, to attend an Assessment Centre and for disqualification from holding or obtaining a driver's licence until the Secretary for Transport makes an order removing that disqualification. Effective from 1 December 1983.
- 1984 1. Regulations governing the approval and use of child restraints introduced.
- 1985 1.The open road speed limit was increased from 80 km/h to 100 km/h for all vehicles except heavy motor vehicles (speed limit now 90 km/h), articulated vehicles (90 km/h) and vehicles towing trailers (80 km/h). Effective from 1 July 1985.
- 1986 1. Staggered relicensing of motor vehicles and provision for lifetime drivers' licences introduced.
  - 2. Strict liability for carriage of insecure loads came into effect (1 February).
- 1987 1. Increased powers of arrest for traffic officers, new driving hours and logbook requirements for professional drivers, graduated licensing system and increased penalties for unlicensed driving introduced (1 August).

- 1988 1. Lowering the legal breath alcohol level from 500  $\mu g/l$  to 400  $\mu g/l$  and the removal of the officers right to require a blood sample in certain circumstances. Increased maximum monetary penalty for serious traffic offences and an increase in the level of infringement fees payable for a number of offences. Introduction of community based sentences as a substitute for disqualification. Increased powers for enforcement officers dealing with offenders who fail to stop.
  - 2. Introduction of class C roads and the removal of the class II road classification. Revised maximum weights for heavy motor vehicles.
- 1989 1. Introduction of the Transit New Zealand Act.
  - 2. Introduction of the Transport Services Licensing Act.
  - 3. Introduction of a new schedule of infringement fees to cover a wide range of minor offences and road user charges infringements. Increased fees for speeding infringements.
  - 4. Traffic enforcement officers given power of entry onto private property for the purposes of undertaking drink driving procedures.
  - 5. Assumption of national traffic enforcement control by the Ministry of Transport.
  - 6. Introduction of new regulations governing the transport of hazardous substances.
- 1990 1. Amendment made to the Transport Act to validate the breath test notice in its existing form.
  - 2. Introduction of the Transport (Vehicle Standards) Regulations 1990.
- 1991 1. There was a change in the driver licence regulations to allow the introduction of the 'scratch' driver licence testing forms.
- 1992 1. The merger of the TSS branch of Land Transport with the NZ Police was implemented 1 July.
  - 2. Amendments made to the Transport Act to allow for compulsory breath testing, reduced alcohol limits for under 20 year olds, extended owner liability regime and reduced driving hours regime all to be brought in over 1993.

- 3. Amendments made to the Transport Services
  Licensing Act to allow for area knowledge for taxi
  drivers, the licensing of rail services, 5 year ID
  cards and tighter controls over taxi organisations
   all to be implemented during 1993.
- 4. Amendments made to T(V & DR & L) Act to implement the new MVR system in 1994.
- 5. New Railway Safety and Corridor Management Act to come in to force over 1993.
- 6. Amendments made to the Transport Accident Investigation Commission Act to include rail accidents.
- 7. Amendments made to the Local Government Act to simplify procedures for removing abandoned vehicles.
- 8. Amendments made to the Road User Charges Act to implement new RUC system over 1993.
- 1993 1. Compulsory Breath Testing commenced April 1993.
  - 2. Speed cameras operational October 1993.
  - 3. Changes to demerit point system, including application from date of offence and graduated points for speeding offences.
  - 4. Introduction of VIN system for vehicle identification purposes.
  - Land Transport Act 1993 created the Land Transport Safety Authority and authorised the making of Rules.
- 1994 1. Compulsory cycle helmet wearing implemented on 1 January.
  - 2. Compulsory child restraints for 0-2 year olds from 1 April.
- 1995 1. Compulsory child restraints for 3-5 year olds from 1 April.
  - 2. Traffic Regulations 1976 amended to provide for reintroduction of light rail/tram services (effective from 20 January 1995).
  - 3. Clarification of colours for use in personalised registration plates, new range of numbers for trailers, and new combined trade plate and licence introduced from 1 July 1995.

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- Land Transport Amendment Act 1995 introduced new National Land Transport Strategy and Regional Land Transport Strategy, with effect from 1 July 1996.
- Transit NZ Amendment Act 1995 provides for new road funding body, Transfund New Zealand, and revised Safety (Administration) and Roading Programmes regime, from 1 July 1996.
- 6. Clarification of vehicle inspection certificate regime's application to registration, licensing and change of ownership of motor vehicles.
- 7. Clarification of Police enforcement powers in respect of heavy vehicles and Road User Charges.
- 8. Amendment to Transport (Vehicle and Driver Registration and Licensing) Act to provide for continuous licensing of motor vehicles (brought into force with effect from 1 Sept 1997).
- 1996 1. Transfund was created as a new crown entity on 1 July 1996 with the principal objective of allocating resources to achieve a safe efficient roading system.
  - 2. The Glazing Rule was gazetted in 1996 to come into effect on 1 Jan 1997. The rule established minimum standards to ensure safe levels of visibility and structural strength for automotive glazing.
- 1997 1. Six vehicle standards rules for impact protection were signed into law in August 1997 to come into effect on 1 January 1998.
- 1998 1. The Land Transport Act 1998 was passed. The Act carried forward the administrative structures and law making processes of the 1993 Act. It incorporates and updates other transport legislation, and makes substantive changes to parts of transport law such as driver licensing, including provision for photographic licences.
  - 2. Vehicle Compliance and Repair Rules were signed into law to come into effect in January 1999.
- 1999 1. Conversion to photographic licences began in May.
  - The following three provisions of the Land Transport Act came into force on 1 March.
     Vehicle impoundment for driving while

disqualified, suspended or revoked or for driving while forbidden.

Roadside licence suspension for driving over 50 km/h above the posted speed limit, for driving with a blood alcohol level above 160 mg/100 ml or a breath alcohol level above  $800\mu g/l$  or for refusing a blood test.

Mandatory licence carriage.

- 3. Dangerous goods rule came into effect on 3 May.
- 4. PSV rule came into effect on 1 September.

2000

- 2001 1.The following vehicle standards rules were signed during the year; Door Retention Systems (revised), Interior Impact (revised), Steering Systems (revised), Frontal Impact (revised), External Projections (revised), Head Restraints (revised), and Tyres and Wheels (new rule).
  - 2. The Land Transport (Road Safety Enforcement) Amendment Act 2001 removed legal impediments to the operation of breath testing devices and urban speed cameras. Under the Act, no matter what the result of a breath test, a driver has the right to request a blood sample. Previously this right was limited to drivers with a breath alcohol level of 600µg/l or below. The Police are still required to immediately suspend, for 28 days, the licences of drivers who give an evidential breath test reading that exceeds 800 μg/l even if the driver requests a blood test. If the blood test result is available within the 28 day suspension period and is less than the blood alcohol qualifying level for mandatory licence suspension (ie 160 mg/100 ml), then the suspension ceases to have effect.
- 2002 1. The following vehicle standards rules were signed during the year; Vehicle Standards Compliance (revised), Seats and Seat Anchorages (new), Seatbelts and Seatbelt Anchorages (new), Light Vehicle Brakes (new), and Vehicle Dimension and Mass (new).
- 2003 1. The Land Transport (Unauthorised Street and Drag Racing) Amendment Act created offences for street racing, wheel spinning and pouring

- slippery substances on the road to allow wheel spinning. Offenders can have their vehicles impounded for 28 days.
- Setting of Speed Limits Rule was signed on 25 February to come into force on a date to be determined by the Minister.
- 3. The Land Transport Management Act came into force November 2003, replacing provisions in the Transit NZ Act dealing with road construction and maintenance and safety funding.
- 2004 1. Heavy Vehicle Rule was signed to come into effect April 2005. This rule codified and updated existing legislation relating to Heavy Vehicle components and equipment.
  - 2. Vehicle Equipment Rule was signed to come into effect February 2005.
  - 3. Vehicle Lighting Rule was signed to come into effect February 2005.
  - Road User Rule was signed to come into effect February 2005. This rule carried over and updated provisions of the Traffic Regulations 1976.
  - Land Transport Management Amendment Act came into effect 1 December 2004, bringing together the bulk of the functions of Transfund and LTSA into one body, Land Transport NZ.

2005

2006 1. Several provisions of the Land Transport
Amendment Bill 2005 came into effect January
2006. These provisions included enhanced
targeting of serious and repeat drink drive
offenders.

For example, mandatory 28 day licence suspension for:

- driving over 40km/h above the posted speed limit
- driving with a blood alcohol level above 130mg/100ml
- the second alcohol offence within 4 years
- the third alcohol offence within 4 years which also attracts a mandatory 28 day vehicle impoundment.
- 2. The Driver Licensing Amendment Rule took effect June 2006 and included changes for older

drivers, overseas drivers and commercial drivers.

3. Removal of periodic, age based practical driving test for older drivers.

2007

2008



